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## Actuarial Report as at December 31, 2007

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**Civil Service Superannuation Fund**

**CRA Registration No. 345827  
MB Registration No. 345827**

October, 2008



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## APPENDICES

- I Financial & Membership Data
- II Summary of the Plan
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## I. ACTUARY'S OPINION

The purpose of this Report (Valuation) is to determine the financial position of the Civil Service Superannuation Fund (Fund) as at December 31, 2007, and the adequacy of the contributions being paid to finance benefits and pay expenses. This Valuation concerns itself with the portion of the benefits financed by the Fund as defined under the Civil Service Superannuation Act (Plan or Act) as at December 31, 2007. A separate report is prepared on the Superannuation Adjustment Account (Indexing Benefits Account) which is responsible for indexing of pensions on and after July 1, 1977, and separate employer reports on the portion of the benefits not financed by the Fund.

Actual experience has been more favourable than expected during the period 2005-2007. In the future, there will be periods when actual experience is more favourable than expected and other periods when actual experience is less favourable than expected, resulting in future gains and losses.

The Fund self-insures all benefits and therefore is exposed to investment and demographic risks which must continue to be monitored in the future. Benefits may alternatively be purchased at an insurance carrier to eliminate a portion of these risks. This strategy may be cost effective in an appropriate economic climate and should be reviewed on an on-going basis by the Civil Service Superannuation Board (Board).

On a going concern basis, the Fund assets are equal to the liabilities as at December 31, 2007. A provision for the contribution deficiency, equal to \$57,429,000, in the next 3 years has been made on the going concern Valuation Balance Sheet. In addition, a provision has been made for future indexing of \$145,068,000 which is anticipated to be transferred to the Indexing Benefits Account in the future. An asset smoothing reserve of \$375,202,000 has been held on the going concern Valuation Balance Sheet to mitigate in full, or in part, possible future adverse investment experience.

In my opinion, for the purposes of this Report:

- The financial and the membership data (Appendix I) on which the Valuation is based are sufficient and reliable for the purpose of the Valuation. The total membership counts shown in the Report are different from the amounts reported in the General Manager's Report due to additional new entrants, retirements, disablements, terminations, and deaths following December 31, 2007 that were provided by the staff of the Board.
- The benefits used in the calculations are based on the Plan as amended to December 31, 2007 (Appendix II).
- The assumptions, individually and in aggregate, and the methods which have been used in this Valuation are appropriate for the purpose of determining the financial position of the Fund and the funding requirements of the Fund on a going concern basis and on a solvency test basis (Appendix III).
- The value of the Fund's assets would be less than the actuarial liabilities if the Fund had been hypothetically wound up on the valuation date (Solvency Test). The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.
- The Fund has no excess surplus based on the requirements found in Section 147.2 of the Income Tax Act.
- This Valuation does not reflect, nor is required to, the new CIA commuted value standards proposed to be effective February 1, 2009, nor the unfavourable investment experience that has occurred after 2007. We are not aware of any other matters or events occurring since the completion of the Valuation which would materially affect the financial position of the Fund as at December 31, 2007.

I hereby certify that, in my opinion, the assets of the Fund, together with the investment income, are sufficient to provide the benefits promised by the Fund, in respect of service completed up to the valuation date, provided future experience is equal to or better than the experience anticipated in the actuarial assumptions. Contribution rates to the Fund will need to be increased at some point in the future to eliminate the current contribution deficiency so that future benefit accruals do not cause an unfunded liability in the Fund.

This Valuation has been prepared and this opinion has been given in accordance with accepted actuarial practice.

This Valuation is subject to approval by the appropriate regulatory authorities. It is recommended the next Valuation occur no later than December 31, 2010. It is recommended the Board continue to monitor the adequacy of the contribution rates. The Board may wish to consider bi-annual valuations in the future given the deficiency in the contribution rates so that it may monitor and ensure the financial health of the Fund.



Dennis Ellement, F.S.A., F.C.I.A.  
Winnipeg, Manitoba   October 30, 2008

## 2. EXECUTIVE SUMMARY

GOING CONCERN VALUATION	31-Dec-07	31-Dec-04
Assets Available for Basic Benefits	\$ 3,375,344,000	\$ 2,597,604,000
Liability for Basic Benefits		
▪ Active Participants	(1,531,516,000)	(1,311,656,000)
▪ Other Participants	(76,894,000)	(66,242,000)
▪ Pensions in Payment	(1,189,235,000)	(941,972,000)
▪ Reserves:		
□ indexing	(145,068,000)	-
□ contribution deficiency	(57,429,000)	(48,244,000)
□ asset smoothing	(375,202,000)	(84,422,000)
□ expenses	-	-
Surplus/(Unfunded Liability) for Basic Benefits	<u>\$ -</u>	<u>\$ 145,068,000</u>
Funded Ratio	100.00%	105.92%

SOLVENCY TEST*	31-Dec-07	31-Dec-04
Assets Available for Basic Benefits	\$ 3,375,344,000	\$ 2,597,604,000
Liability for Basic Benefits		
▪ Active Participants	(2,009,022,000)	(1,449,670,000)
▪ Other Participants	(90,014,000)	(66,977,000)
▪ Pensions in Payment	(1,449,722,000)	(1,056,766,000)
▪ Reserves:		
□ indexing	-	-
□ contribution deficiency	-	-
□ asset smoothing	-	-
□ expenses	(16,877,000)	(12,988,000)
Solvency Test Excess/(Deficiency) for Basic Benefits	<u>\$ (190,291,000)</u>	<u>\$ 11,203,000</u>
Solvency Ratio	94.66%	100.43%

\* The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.

ANNUAL CONTRIBUTION REQUIREMENTS	2008 <CPPE / ≥CPPE	2005 <CPPE / ≥CPPE
Required Contributions for Basic Benefits		
▪ Required Contributions:		
□ Employee Required Contributions	6.00% / 7.00%	6.00% / 7.00%
□ Employer (Matching) Required Contributions	5.10% / 7.00%	5.10% / 7.00%
Blended Required Contributions	<u>5.96% / 7.00%</u>	<u>5.96% / 7.00%</u>
▪ Indexing Account Allocation	<u>(0.61%) / (0.71%)</u>	<u>(0.61%) / (0.71%)</u>
Total Required Contributions for Basic Benefits	5.34% / 6.29%	5.35% / 6.29%
Total Theoretical Contributions for Basic Benefits	<u>(6.54%) / (7.70%)</u>	<u>(6.56%) / (7.71%)</u>
Contribution Margin/(Deficiency) for Basic Benefits	<u>(1.20%) / (1.41%)</u>	<u>(1.21%) / (1.42%)</u>

\*\* Contribution Requirements are represented as a percentage of earnings above/below the Canada Pension Plan Earnings (CPPE).

### 3. GOING CONCERN VALUATION

	31-Dec-07	31-Dec-04
<b>Assets Available for Basic Benefits (Appendix I)</b>		
Fixed Income Investments (market value)	\$ 1,263,303,000	\$ 1,279,011,000
Equity Investments (market value)	<u>2,710,472,000</u>	<u>1,667,133,000</u>
	\$ 3,973,775,000	\$ 2,946,144,000
Net Receivables/Payables et al	16,774,000	16,327,000
Debt due from the Province of Manitoba	1,826,000	1,826,000
Correctional Officers' Trust Account	(4,041,000)	(3,040,000)
Employer Trust Accounts	(53,931,000)	(39,438,000)
Money Purchase Accounts Plan	(16,412,000)	(10,403,000)
Province Unfunded Pension Liability Trust Account	<u>(330,740,000)</u>	<u>(139,163,000)</u>
Net Assets Available for Benefits	\$ 3,587,251,000	\$ 2,772,253,000
Superannuation Adjustment Account	<u>(211,907,000)</u>	<u>(174,649,000)</u>
<b>Total Assets Available for Basic Benefits</b>	<u><u>\$ 3,375,344,000</u></u>	<u><u>\$ 2,597,604,000</u></u>
 <b>Liabilities for Basic Benefits (Appendix II, III)</b>		
▪ Active Participants:		
<input type="checkbox"/> not eligible to retire	\$ 1,063,542,000	\$ 719,263,000
<input type="checkbox"/> eligible to retire reduced	76,042,000	99,091,000
<input type="checkbox"/> eligible to retire unreduced	391,932,000	493,302,000
	<u>\$ 1,531,516,000</u>	<u>\$ 1,311,656,000</u>
▪ Other Participants:		
<input type="checkbox"/> not eligible to retire	65,634,000	56,960,000
<input type="checkbox"/> eligible to retire reduced	5,892,000	4,278,000
<input type="checkbox"/> eligible to retire unreduced	5,368,000	5,004,000
	<u>\$ 76,894,000</u>	<u>\$ 66,242,000</u>
▪ Pensions in Payment:		
<input type="checkbox"/> retirement pensions	1,108,260,000	846,764,000
<input type="checkbox"/> survivors' pensions	80,975,000	95,208,000
	<u>\$ 1,189,235,000</u>	<u>\$ 941,972,000</u>
▪ Reserves:		
<input type="checkbox"/> indexing	145,068,000	-
<input type="checkbox"/> contribution deficiency	57,429,000	48,244,000
<input type="checkbox"/> asset smoothing	375,202,000	84,422,000
<input type="checkbox"/> expenses	-	-
	<u>\$ 577,699,000</u>	<u>\$ 132,666,000</u>
<b>Total Liabilities for Basic Benefits</b>	<u><u>\$ 3,375,344,000</u></u>	<u><u>\$ 2,452,536,000</u></u>
<b>Surplus/(Unfunded Liability) for Basic Benefits</b>	<u><u>\$ -</u></u>	<u><u>\$ 145,068,000</u></u>
<b>Funded Ratio</b>	<b>100.00%</b>	<b>105.92%</b>

#### 4. SOLVENCY TEST\*

	31-Dec-07	31-Dec-04
<b>Assets Available for Basic Benefits (Appendix I)</b>		
Fixed Income Investments (market value)	\$ 1,263,303,000	\$ 1,279,011,000
Equity Investments (market value)	<u>2,710,472,000</u>	<u>1,667,133,000</u>
	\$ 3,973,775,000	\$ 2,946,144,000
Net Receivables/Payables et al	16,774,000	16,327,000
Debt due from the Province of Manitoba	1,826,000	1,826,000
Correctional Officers' Trust Account	(4,041,000)	(3,040,000)
Employer Trust Accounts	(53,931,000)	(39,438,000)
Money Purchase Accounts Plan	(16,412,000)	(10,403,000)
Province Unfunded Pension Liability Trust Account	<u>(330,740,000)</u>	<u>(139,163,000)</u>
Net Assets Available for Benefits	\$ 3,587,251,000	\$ 2,772,253,000
Superannuation Adjustment Account	<u>(211,907,000)</u>	<u>(174,649,000)</u>
<b>Total Assets Available for Basic Benefits</b>	<b><u>\$ 3,375,344,000</u></b>	<b><u>\$ 2,597,604,000</u></b>
 <b>Liabilities for Basic Benefits (Appendix II, III)</b>		
▪ Active Participants:		
<input type="checkbox"/> not eligible to retire	\$ 1,360,380,000	\$ 794,945,000
<input type="checkbox"/> eligible to retire reduced	108,209,000	109,517,000
<input type="checkbox"/> eligible to retire unreduced	540,433,000	545,208,000
	<u>\$ 2,009,022,000</u>	<u>\$ 1,449,670,000</u>
▪ Other Participants:		
<input type="checkbox"/> not eligible to retire	76,322,000	57,592,000
<input type="checkbox"/> eligible to retire reduced	7,193,000	4,325,000
<input type="checkbox"/> eligible to retire unreduced	6,499,000	5,060,000
	<u>\$ 90,014,000</u>	<u>\$ 66,977,000</u>
▪ Pensions in Payment:		
<input type="checkbox"/> retirement pensions	1,354,179,000	950,510,000
<input type="checkbox"/> survivors' pensions	95,543,000	106,256,000
	<u>\$ 1,449,722,000</u>	<u>\$ 1,056,766,000</u>
▪ Reserves:		
<input type="checkbox"/> indexing	-	-
<input type="checkbox"/> contribution deficiency	-	-
<input type="checkbox"/> asset smoothing	-	-
<input type="checkbox"/> expenses	16,877,000	12,988,000
	<u>\$ 16,877,000</u>	<u>\$ 12,988,000</u>
<b>Total Liabilities for Basic Benefits</b>	<b><u>\$ 3,565,635,000</u></b>	<b><u>\$ 2,586,401,000</u></b>
<b>Solvency Test/(Deficiency) for Basic Benefits</b>	<b><u>\$ (190,291,000)</u></b>	<b><u>\$ 11,203,000</u></b>
<b>Solvency Ratio</b>	<b>94.66%</b>	<b>100.43%</b>

\* The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.

## 5. CONTRIBUTION REQUIREMENTS

The accrued benefit cost method of valuation, with salary projection, has been used in this Valuation. Under this method, the expected cost in each year after the valuation date is equal to the cost of benefits expected to be credited for service in the next year. This expected cost is expressed as a level percentage of salary each year. These percentages are commonly called the theoretical contribution rates or normal actuarial cost for basic benefits.

In the following table, we have compared the required contribution rates and the normal actuarial cost for basic benefit rates (below/above Canada Pension Plan Earnings (CPPE)) on the basis of age, sex, and salary distribution, as exists for present active participants:

	2008				2005		
	< CPPE / ≥ CPPE *				< CPPE / ≥ CPPE		
<b>Required Contributions for Basic Benefits</b>							
• Employee Required Contributions:							
▫ not eligible to retire	\$ 75,597,000	6.00%	7.00%	\$ 62,454,000	6.00%	7.00%	
▫ eligible to retire	3,397,000	6.00%	7.00%	4,126,000	6.00%	7.00%	
▫ eligible to retire unreduced	10,580,000	6.00%	7.00%	12,861,000	6.00%	7.00%	
▫ indexing account allocation	(9,137,000)	(0.61%)	(0.71%)	(8,103,000)	(0.61%)	(0.71%)	
• Employer (Matching) Required Contributions:							
▫ not eligible to retire	4,853,000	5.10%	7.00%	3,443,000	5.10%	7.00%	
▫ eligible to retire	160,000	5.10%	7.00%	120,000	5.10%	7.00%	
▫ eligible to retire unreduced	291,000	5.10%	7.00%	310,000	5.10%	7.00%	
▫ indexing account allocation	(541,000)	(0.52%)	(0.71%)	(395,000)	(0.52%)	(0.71%)	
<b>Total Required Contributions for Basic Benefits</b>	<b>\$ 85,200,000</b>	<b>5.34% / 6.29%</b>		<b>\$ 74,816,000</b>	<b>5.35% / 6.29%</b>		
<b>Normal Actuarial Cost for Basic Benefits</b>							
• Active Participants:							
▫ not eligible to retire	\$ 84,909,000	6.28% /	7.39%	\$ 67,426,000	6.10% /	7.17%	
▫ eligible to retire reduced	4,812,000	8.04% /	9.48%	5,790,000	8.12% /	9.55%	
▫ eligible to retire unreduced	14,622,000	8.00% /	9.42%	18,465,000	8.35% /	9.82%	
Blended Active Participant Theoretical Rate	\$ 104,343,000	6.54% /	7.70%	\$ 91,681,000	6.56% /	7.71%	
• Other Participants	-	0.00% /	0.00%	-	0.00% /	0.00%	
• Pensions in Payment	-	0.00% /	0.00%	-	0.00% /	0.00%	
• Reserves	-	0.00% /	0.00%	-	0.00% /	0.00%	
<b>Total Normal Actuarial Cost for Basic Benefits</b>	<b>\$ 104,343,000</b>	<b>6.54% / 7.70%</b>		<b>\$ 91,681,000</b>	<b>6.56% / 7.71%</b>		
<b>Contribution Margin/(Deficiency) for Basic Benefits</b>	<b>\$ (19,143,000)</b>	<b>(1.20%) / (1.41%)</b>		<b>\$ (16,865,000)</b>	<b>(1.21%) / (1.42%)</b>		

\* Contribution Requirements are represented as a percentage of earnings above/below the Canada Pension Plan Earnings (CPPE).

A provision for the \$19,143,000 annual contribution deficiency has been made on the Valuation Balance Sheet. This provision is equal to \$57,429,000 for the next 3 years.

The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.

## 6. ANALYSIS OF RESULTS

### ▪ Reconciliation of Surplus

	Assets	Liabilities	Reserves	Surplus
2004 Closing Financial Position: 2004 Basis	\$ 2,597,604,000	\$ 2,319,870,000	\$ 132,666,000	\$ 145,068,000
Contributions/Benefits Accrued	85,811,000	101,531,000	(15,720,000)	-
Benefit Experience	(104,161,000)	(99,703,000)	-	(4,458,000)
Investment Experience 14.27%	370,060,000	150,850,000	11,431,000	207,779,000
Actuarial Reserve Change	-	74,176,000	165,397,000	(239,573,000)
2005 Projected Closing Going Concern	\$ 2,949,314,000	\$ 2,546,724,000	\$ 293,774,000	\$ 108,816,000
Contributions/Benefits Accrued	96,544,000	113,537,000	(16,993,000)	-
Benefit Experience	(116,667,000)	(111,210,000)	-	(5,457,000)
Investment Experience 12.59%	370,613,000	165,613,000	11,391,000	193,609,000
Actuarial Reserve Change	-	123,948,000	76,795,000	(200,743,000)
2006 Projected Closing Going Concern	\$ 3,299,804,000	\$ 2,838,612,000	\$ 364,967,000	\$ 96,225,000
Contributions/Benefits Accrued	88,153,000	102,477,000	(14,324,000)	-
Benefit Experience	(132,132,000)	(122,734,000)	-	(9,398,000)
Investment Experience 3.58%	119,519,000	183,851,000	2,455,000	(66,787,000)
Actuarial Reserve Change	-	(12,788,000)	27,500,000	(14,712,000)
2007 Projected Closing Going Concern	\$ 3,375,344,000	\$ 2,989,418,000	\$ 380,598,000	\$ 5,328,000
Release Interim Reserves	-	(180,027,000)	(68,402,000)	248,429,000
ITA Maximum Pensionable Salary Limit	-	5,814,000	-	(5,814,000)
Salary Gain 3-Year Experience	-	(15,274,614)	-	15,274,614
Demographic Gain 3-Year Experience	-	(2,285,386)	-	2,285,386
2007 Closing Going Concern: 2004 Basis	\$ 3,375,344,000	\$ 2,797,645,000	\$ 312,196,000	\$ 265,503,000
Actuarial Assumption Change	-	-	-	-
Indexing Reserve	-	-	-	-
Contribution Deficiency Reserve	-	-	-	-
Asset Smoothing Reserve	-	-	265,503,000	(265,503,000)
2007 Closing Going Concern: 2007 Basis	\$ 3,375,344,000	\$ 2,797,645,000	\$ 577,699,000	\$ -

### ▪ Average Actuarial Factors

Category	Age	# Members		Fund	Pension	Actuarial Factor		Liability
<b>31-Dec-07</b>								
▪ Active Participants	44.93	27,307	×	×	\$ 531.66	×	8.7909	= \$ 1,531,516,000
▪ Other Participants	48.34	2,900	×	12	×	218.49	×	10.1133 = 76,894,000
▪ Pensions in Payment	69.79	14,913	×	12	×	639.89	×	10.3852 = 1,189,235,000
▪ Reserves	-	-			-	-	-	577,699,000
▪ Surplus	-	-			-	-	-	-
Total/Average	53.37	45,120	×	12	×	\$ 547.30	×	11.3905 = \$ 3,375,344,000
<b>31-Dec-04</b>								
▪ Active Participants	44.63	26,761	×	12	×	\$ 476.31	×	8.5752 = \$ 1,311,656,000
▪ Other Participants	47.81	2,909	×	12	×	224.03	×	8.4704 = 66,242,000
▪ Pensions in Payment	69.34	13,080	×	12	×	580.84	×	10.3322 = 941,972,000
▪ Reserves	-	-			-	-	-	132,666,000
▪ Surplus	-	-			-	-	-	145,068,000
Total/Average	52.41	42,750	×	12	×	\$ 491.13	×	10.3100 = \$ 2,597,604,000

## 7. FUND BASIC BENEFIT LIABILITIES EMPLOYER PROFILE

Name of Employer	Code	Active Participants	Other Participants	Pensions in Payment	2007 Total	%
<b>Non-Matching Employers</b>						
1 Province of Manitoba Civil Service	CS	\$ 812,440,700	\$ 50,321,200	\$ 721,845,300	\$ 1,584,607,200	56.64%
2 Manitoba Hydro-Electric Board	MH	378,476,400	6,659,100	289,745,100	674,880,600	24.12%
3 Manitoba Public Insurance	AI/AIE	81,523,500	3,692,200	38,039,600	123,255,300	4.41%
4 Division of Driver and Vehicle Licensing	AIL	2,471,100	87,900	195,100	2,754,100	0.10%
5 Red River College	RCC	36,566,300	937,400	19,782,000	57,285,700	2.05%
6 Liquor Control Commission	LC	23,211,600	1,144,700	21,689,700	46,046,000	1.65%
7 Addictions Foundation of Manitoba	AF	9,202,700	625,500	7,308,700	17,136,900	0.61%
8 Assiniboine Community College	ACC	7,846,600	634,300	5,479,100	13,960,000	0.50%
9 University College of The North	KCC	7,619,300	598,000	3,640,500	11,857,800	0.42%
10 The Legal Aid Services Society of Manitoba	LA	8,888,800	319,300	2,797,700	12,005,800	0.43%
11 Manitoba Centennial Centre Corporation	CC	2,443,200	77,800	2,452,900	4,973,900	0.18%
12 Teachers' Retirement Allowance Fund Board	TR	1,423,600	604,900	834,300	2,862,800	0.10%
13 Communities Economic Development Fund	CE	888,300	122,800	453,600	1,464,700	0.05%
14 The Council on Post-Secondary Education	UG	322,700	7,100	497,800	827,600	0.03%
15 Manitoba Horse Racing Commission	RC	82,200	23,000	205,300	310,500	0.01%
16 Diagnostic Services of Manitoba	DSM	31,300	-	-	31,300	0.00%
17 Regional Health Authority - Winnipeg	RVA	8,783,200	184,100	1,879,400	10,846,700	0.39%
18 Regional Health Authority - Brandon	RBH	7,393,500	245,100	2,327,300	9,965,900	0.36%
19 Regional Health Authority - Central	RCA	3,348,200	322,700	1,175,200	4,846,100	0.17%
20 Regional Health Authority - Assiniboine	ARH et al	3,427,200	39,000	707,900	4,174,100	0.15%
21 Regional Health Authority - Parkland	RPL	2,691,800	262,900	811,500	3,766,200	0.13%
22 Regional Health Authority - Interlake	RIL	2,877,600	189,000	853,300	3,919,900	0.14%
23 Regional Health Authority - South Eastman	RSE	1,277,800	23,400	189,300	1,490,500	0.05%
24 Regional Health Authority - Nor-Man	RNF/RNM	924,000	33,700	207,300	1,165,000	0.04%
25 Regional Health Authority - North Eastman	RNE	1,004,000	-	320,900	1,324,900	0.05%
26 Regional Health Authority - Burntwood	RBW	450,300	33,100	72,000	555,400	0.02%
27 Money Purchase Plan Annuity	MPP	-	-	3,433,000	3,433,000	0.12%
28 Workers' Compensation Board	WVC	-	-	82,500	82,500	0.00%
29 WECO	WEC	-	-	1,094,200	1,094,200	0.04%
		<b>\$ 1,405,615,900</b>	<b>\$ 67,188,200</b>	<b>\$ 1,128,120,500</b>	<b>\$ 2,600,924,600</b>	<b>92.97%</b>
<b>Matching Employers</b>						
1 Manitoba Lotteries Corporation	LF	17,775,700	1,377,300	5,109,300	24,262,300	0.87%
2 Manitoba Housing Authority	HA	15,766,100	1,596,200	9,428,400	26,790,700	0.96%
3 Manitoba Agricultural Services Corporation	MAS/AC	4,899,600	337,300	2,561,600	7,798,500	0.28%
4 Manitoba Crop Insurance Corporation	CI /CIC	11,137,900	438,800	8,804,800	20,381,500	0.73%
5 Manitoba Government and General Employees' Union	EA	7,704,300	436,700	5,475,500	13,616,500	0.49%
6 Manitoba Hydro Utilities Service	MHU	316,200	28,400	-	344,600	0.01%
7 Child and Family All Nations Coordinated Network	ANR	162,000	14,100	-	176,100	0.01%
8 The Civil Service Superannuation Board	SB	5,448,100	826,800	2,415,900	8,860,800	0.31%
9 Gaming Control Commission	GC	1,741,400	-	233,400	1,974,800	0.07%
10 Travel Manitoba	TM	544,400	22,100	53,400	619,900	0.02%
11 Food Development Centre	FD	596,000	235,500	102,400	933,900	0.03%
12 Manitoba Floodway Expansion Authority Inc.	MFA	490,500	61,900	-	552,400	0.02%
13 Dairy Farmers of Manitoba	MC	1,272,400	616,600	1,512,700	3,401,700	0.12%
14 Industrial Technology Centre	IT	1,420,300	211,500	305,600	1,937,400	0.07%
15 Manitoba Pork Marketing Co-Op Inc.	HM	1,014,700	80,800	3,463,800	4,559,300	0.16%
16 Manitoba Film and Sound	MFS	155,800	22,100	-	177,900	0.01%
17 Manitoba Pork Council	PC	302,900	20,400	788,300	1,111,600	0.04%
18 Manitoba Arts Council	MA	156,100	15,400	425,800	597,300	0.02%
19 Manitoba Chicken Producer Board	CB	167,800	114,300	152,800	434,900	0.02%
20 Sport Manitoba	SM	487,200	11,200	43,500	541,900	0.02%
21 Crown Corporations Council	CR	723,400	-	521,700	1,245,100	0.04%
22 Manitoba Cattle Enhancement Council	MCE	16,400	-	-	16,400	0.00%
23 Manitoba Turkey Producers	TB	232,300	160,200	236,100	628,600	0.02%
24 Paletta & Company Hotels	PCH	17,600	-	2,900	20,500	0.00%
25 Venture Manitoba Tours Ltd.	VT	197,800	-	45,300	243,100	0.01%
26 Economic Innovation and Technology Council	MR	907,700	1,374,400	2,854,200	5,136,300	0.18%
27 Manitoba Development Corporation	DPP	15,100	72,200	646,000	733,300	0.03%
28 Manitoba Hazardous Waste	HWW	-	-	490,700	490,700	0.02%
29 Manitoba Water Services Board	WWS	-	83,500	463,600	547,100	0.02%
30 Human Resources and Employment Centres	R's/HE	1,657,500	271,800	1,635,400	3,564,700	0.13%
31 Manitoba Beef Commission	BC	126,900	-	313,200	440,100	0.02%
32 Local Government Districts	LG	-	-	152,300	152,300	0.01%
33 Manitoba Mineral Resources Limited	MM	-	-	37,800	37,800	0.00%
34 Manitoba Data Services	DS	-	-	373,700	373,700	0.01%
35 No Billing (Charged to Fund)	NB	<b>\$ 50,445,900</b>	<b>1,276,000</b>	<b>12,464,800</b>	<b>64,186,700</b>	<b>2.29%</b>
		<b>\$ 125,900,000</b>	<b>\$ 9,705,500</b>	<b>\$ 61,114,900</b>	<b>\$ 196,720,400</b>	<b>7.03%</b>
31-Dec-07 Total Fund Liabilities		<b>\$ 1,531,515,900</b>	<b>\$ 76,893,700</b>	<b>\$ 1,189,235,400</b>	<b>\$ 2,797,645,000</b>	<b>100.00%</b>
31-Dec-04 Total Fund Liabilities		<b>\$ 1,311,656,200</b>	<b>\$ 66,242,000</b>	<b>\$ 941,972,000</b>	<b>\$ 2,319,870,200</b>	<b>100.00%</b>

## 8. SENSITIVITY TEST (DURATION)

The impact on pension liabilities of changes in the actuarial assumptions depends largely upon the number of years over which benefits will be paid and the exact pattern of the expected benefit cash flow.

The demographics of the group covered by a valuation has an impact on the resulting change in liability for a given change in an actuarial assumption.

Different parts of the valuation are affected differently by a change in a specific valuation assumption. Two of the more significant assumptions are the real rate of return and the assumed inflation rate expected in the future.

There are rules of thumb to estimate the effect upon liabilities of a change in the assumed real rate or assumed inflation rate. These rules of thumb can be expressed mathematically by introducing the concept of duration where:

$$\% \text{ change in liability} = - \text{duration} \times \% \text{ change in assumed rate}$$

The approximation is usually quite good for small changes in the assumed rate (we will test a negative 1/4% change). For larger changes, the concept of convexity must be introduced which we will not explore in this Report.

The following table summarizes the application of the above formula to the Fund data as at December 31, 2007, if the liabilities had been calculated using a hypothetical nominal interest rate of 6.25% (comprised of 3.75% real rate and 2.50% inflation rate) and a hypothetical mortality table of UP2015. Small 0.25% changes in the inflation or the real rate have been examined to determine the duration of the liabilities.

Real Rate	3.75%	Decrease Inflation Rate 1/4%			Decrease Real Rate 1/4%		
		3.75%	2.25%	6.00%	3.50%	2.50%	6.00%
Inflation Rate	2.50%	UP2015	% Change in Liability	Estimated Inflation Duration	UP2015	% Change in Liability	Estimated Real Duration
Nominal Rate	6.25%	UP2015		Estimated	UP2015	% Change in	Estimated
Mortality Liability Category	UP2015	Liability		Liability	Liability	Liability	Real Duration
Active Participants	\$ 1,631,973,000	\$ 1,678,811,000	2.87%	11.48	\$ 1,700,004,000	4.17%	16.67
Other Participants	80,550,000	82,449,000	2.36%	9.43	83,121,000	3.19%	12.77
Pensions in Payment	1,236,115,000	1,263,060,000	2.18%	8.72	1,263,060,000	2.18%	8.72
Reserves	426,706,000	351,024,000	17.74%	70.95	329,159,000	22.86%	91.44
Surplus/(Unfunded)	-	-	-	-	-	-	-
Total (excludes Reserves)	\$ 2,948,638,000	\$ 3,024,320,000	2.57%	10.27	\$ 3,046,185,000	3.31%	13.23
Increase/(Decrease) in Liabilities		\$ 75,682,000			\$ 97,547,000		

The higher the duration, the more sensitive the financial position of the Fund is to a change in actuarial assumption.

Active participant liabilities are more sensitive (volatile) to a change in the assumed rates than other participants. Pensions in payment liabilities are the least sensitive.

The inflation rate changes have about 75% of the impact as an equal change in the real rate.

Further details of the historical inflation and real rates are found in Appendix I.

## **9. PROVISION FOR FUTURE ADVERSE DEVIATIONS (PfADs)**

### **Assumed Rate of Return**

Currently, there is a PfAD contained implicitly in the assumed rate of return of 6.50% per year, which is equal to 1.15% (please refer to Appendix III - Page 5 for further detail). This provision may or may not prove to be adequate in the future. Consideration should be given to lowering the current real rate of 4.00% per year in the future.

### **Retirement Rates**

Current expected retirement rates provide a best estimate of actual retirement experience to date. Given the large number of "baby boomer" retirees expected in the near future, these rates may or may not prove to be adequate in the future. Continued monitoring of retirement experience should occur.

### **Mortality Rates**

Current expected mortality rates provide a best estimate of actual mortality experience to date. Given that these rates are different than the basis on which lump-sum payments are made and the increasing longevity of the population, these rates may or may not prove to be adequate. Continued monitoring of mortality experience should occur.

### **Indexing Reserve**

A provision for the anticipated movement of the 2004 Report going concern surplus equal to \$145,068,000 from the Basic Fund to the Indexing Benefits Account has been made for this Report. The movement of this amount has been agreed to by the Liaison and Advisory Committees.

### **Contribution Deficiency Reserve**

A provision for the \$19,143,000 annual contribution deficiency has been made on the going concern Valuation Balance Sheet. This provision is equal to \$57,429,000 for the next 3 years. This provision assumes that there will be no change in the contribution rates to the Fund in the next 3 years.

Contribution rates to the Fund will be needed to increase at some point in the future to eliminate the current contribution deficiency so that future benefit accruals do not cause an unfunded liability in the Fund.

### **Asset Smoothing Reserve**

An asset smoothing reserve to buffer possible future adverse investment experience has been increased for this Report and is equal to \$375,202,000 on the going concern Valuation Balance Sheet (please refer to Appendix III - Page 3). This reserve has been increased for this Valuation to mitigate in full, or in part, possible future adverse investment experience.

## **10. SUBSEQUENT EVENTS**

This Valuation does not reflect nor is required to, the new Canadian Institute of Actuaries (CIA) commuted value standards proposed to be effective February 1, 2009. These rates are used in the solvency test. The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.

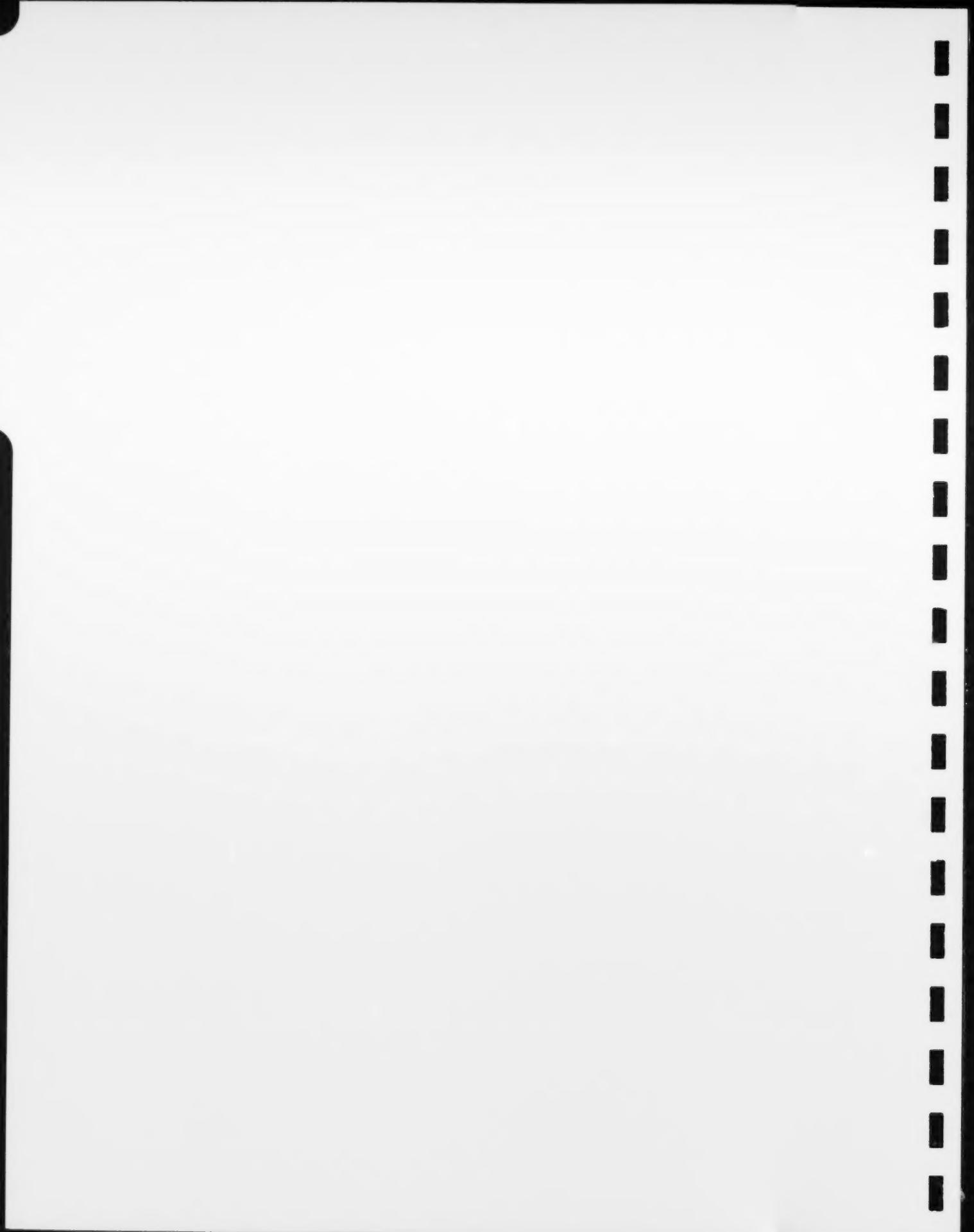
This Valuation does not reflect the unfavorable investment experience that has occurred after 2007 other than to provide for an asset smoothing reserve equal to \$375,202,000. If the actual investment return in 2008 is lower than a negative 5.50%, then a deficit in the Fund will occur, assuming all other experience is neutral.

This Valuation does not reflect any additional retirement reserve in respect of the unusually large number of active participants ("baby boomers") who are eligible to retire at the valuation date or in the near future. The current retirement rates anticipate about 1,000 retirements per year. If the actual retirements exceed the anticipated retirements then a retirement loss will occur to the Fund.

Contribution rates to the Fund will need to be increased at some point in the future to eliminate the current contribution deficiency so that future benefit accruals do not cause an unfunded liability in the Fund.

We are not aware of any other matters or subsequent events occurring since the completion of this Report which would materially adversely affect the financial position as at December 31, 2007.





## APPENDIX I

### Financial & Membership Data

#### I. Total Assets Available for Basic Benefits (Source: Audited Financial Statements)

	31-Dec-07	31-Dec-04
<b>Assets</b>		
Fixed Income Investments (market value)	\$ 1,263,303,000	\$ 1,279,011,000
Equity Investments (market value)	2,710,472,000	1,667,133,000
	\$ 3,973,775,000	\$ 2,946,144,000
Net Receivables/Payables et al	16,774,000	16,327,000
Debt due from the Province of Manitoba (Note 1)	1,826,000	1,826,000
Correctional Officers' Trust Account (Note 2)	(4,041,000)	(3,040,000)
Employer Trust Accounts (Note 3)	(53,931,000)	(39,438,000)
Money Purchase Accounts Plan (Note 4)	(16,412,000)	(10,403,000)
The Province of Manitoba Unfunded Pension		
Liability Trust Account (Note 5)	(330,740,000)	(139,163,000)
	\$ 3,587,251,000	\$ 2,772,253,000
Superannuation Adjustment Account	(211,907,000)	(174,649,000)
<b>Total Assets Available for Basic Benefits</b>	<b>\$ 3,375,344,000</b>	<b>\$ 2,597,604,000</b>

Note 1: Under Section 24(1) of the Act, the Province of Manitoba assumed an accrued liability of \$1,826,000 for its employees and pensioners as at May 1, 1939. The Province of Manitoba pays semi-annual interest at 4.00% per annum on this amount.

Note 2: Effective November 19, 1996, employees who are members of the Province of Manitoba's Corrections Component are required to contribute an additional 1.00% of pensionable earnings. These additional contributions, which are credited to this trust account, are intended to fund the additional pension benefits for eligible employees who may retire as early as age 50 with no reduction for early retirement providing age and qualifying service is equal to a total of 75 or greater.

Note 3: The Fund is responsible for providing enhanced benefits enacted in the 1992 legislation agreed to by the Employee Liaison Committee and the Employer Pension Advisory Committee. These benefits are 100% financed from the Fund's net assets available for benefits. To facilitate this funding, trust accounts were established for non-matching employers participating in the Fund for their share of the actuarial valuation of these future benefit enhancements. Specific contributions from eligible employees are being transferred to the applicable trust account.

Note 4: Effective January 2, 1985, a separate Money Purchase Accounts Plan was established to enhance the portability of pensions. Contributors include employees, recipients of superannuation allowances, annuities or pensions payable under the Act, or persons on whose behalf the Board is required or requested to transfer moneys to this Plan. Refunds are made upon written request by the contributor. Administrative costs are recovered by the Board.

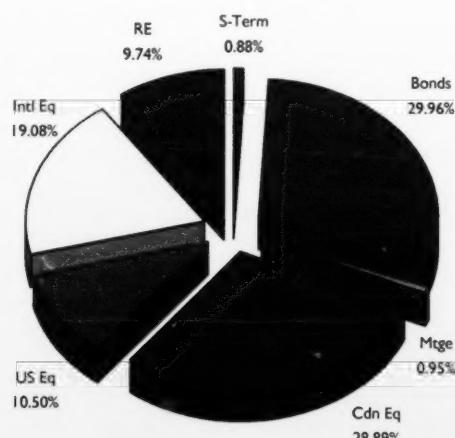
Note 5: The Balanced Budget, Debt Repayment and Taxpayer Protection Amendment and Consequential Amendments Act (Amendments Act) came into effect on August 18, 2000. This Amendments Act requires the Province of Manitoba (the Province) to establish a fund and to make payments to the established fund.

Under the terms of a March 6, 2001 agreement between the Province and the Board, the Province established a fund with the Board and the Province is making the required payments to this fund. As well, the Province is making payments to this fund that are related to the Special Operating Agencies unfunded pension liabilities. Payments received by the Board from the Province are held by the Board in trust for and on behalf of the Province and are invested by the Board on behalf of the Province. The payments received are not assets of the Plan and accordingly, they are accounted for by the Fund in the Unfunded Pension Liability Trust Account. This trust account earns investment income at a rate of return equal to the rate of return earned by the Fund. The Board receives an investment management fee for its services. The payments made by the Province to the Board do not reduce the accrued pension benefit obligations of the Fund.

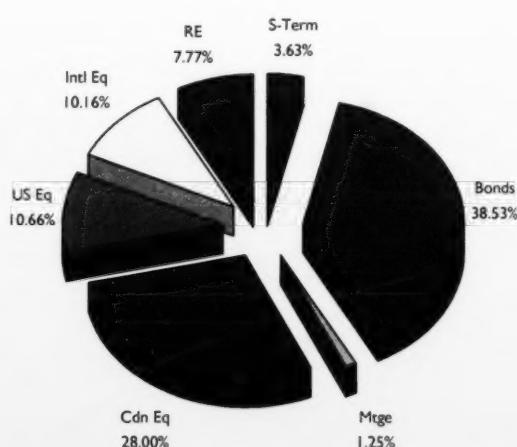
## 2. Asset Mix Distribution

		31-Dec-07		31-Dec-04
1. Short Term (S-Term)	\$ 34,985,000	0.88%	\$ 107,080,000	3.63%
2. Bonds and Debentures (Bonds)	1,190,472,000	29.96%	1,135,038,000	38.53%
3. Mortgages (Mtge)	37,846,000	0.95%	36,893,000	1.25%
Fixed Income	\$ 1,263,303,000	31.79%	\$ 1,279,011,000	43.41%
4. Canadian Equities (Cdn Eq)	1,147,945,000	28.89%	825,070,000	28.00%
5. U.S. Equities (US Eq)	417,340,000	10.50%	313,971,000	10.66%
6. Non-North American Equities (Intl Eq)	758,188,000	19.08%	299,292,000	10.16%
7. Real Estate (RE)	386,999,000	9.74%	228,800,000	7.77%
Equity	\$ 2,710,472,000	68.21%	\$ 1,667,133,000	56.59%
	\$ 3,973,775,000	100.00%	\$ 2,946,144,000	100.00%

31-Dec-07

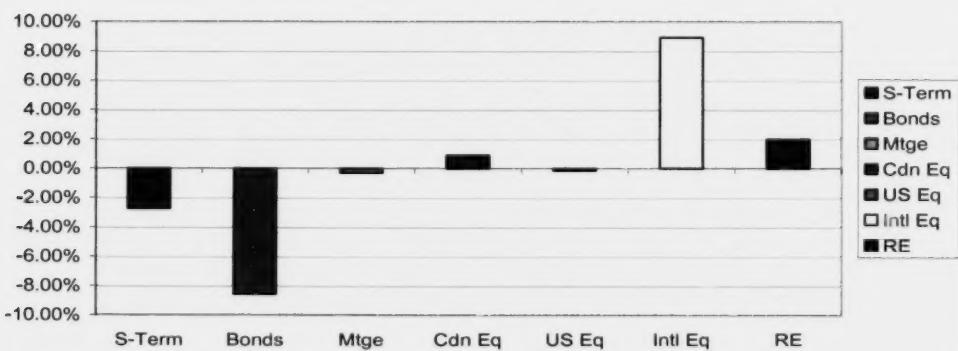


31-Dec-04



To limit the exposure to interest rate fluctuation and to obtain the best possible return at an acceptable risk, the Board established a long-term investment asset mix policy of 40% fixed income and 60% equity (Source: Audited Financial Statements).

Asset Mix Overweight / Underweight Changes 2004 to 2007



### 3. Historical Cash Flow: 69 Years

Year**	[1] Fund & Pay-as-you-go		[4] Expenses		[5] Investment Fees		[6] Investment Income		[7] Closing Assets		[8] Net Return		[9] Inflation		[10] Real Return		
	Contributions	Benefits	0 \$	0 \$	0 \$	0 \$	0 \$	0 \$	0 \$	5,022,908	2.37%	2.59%	(0.21%)	0 \$	0 \$	0 \$	
1939	452,383	(117,994)	(4,151)	0	123,003	5,476,149	2.37%	2.59%	(0.21%)								
1940	462,964	(172,927)	(8,018)	0	130,602	5,888,770	2.33%	5.04%	(2.58%)								
1941	594,089	(200,751)	(7,086)	0	181,856	6,456,878	2.99%	6.40%	(3.20%)								
1942	455,779	(208,762)	(9,488)	0	189,072	6,883,479	2.88%	3.01%	(0.13%)								
1943	440,959	(228,891)	(6,852)	0	203,731	7,292,426	2.92%	1.46%	1.44%								
1944	441,331	(237,906)	(6,801)	0	121,812	7,610,862	1.65%	(1.44%)	3.14%								
1945	476,802	(279,094)	(8,365)	0	243,235	8,043,440	3.16%	1.46%	1.68%								
1946*	495,588	(284,104)	(6,597)	0	184,284	8,432,611	2.26%	5.76%	(3.31%)								
1947	778,339	(328,404)	(7,869)	0	236,658	9,111,335	2.73%	14.97%	(10.65%)								
1948*	792,068	(372,476)	(10,715)	0	(218,081)	9,302,131	1.34%	8.88%	(6.93%)								
1949	905,065	(421,390)	(9,473)	0	262,446	10,038,779	2.75%	1.09%	1.64%								
1950	994,024	(469,602)	(9,293)	0	286,002	10,839,910	2.78%	5.91%	(2.96%)								
1951*	1,179,579	(527,278)	(12,349)	0	(179,115)	11,300,747	(1.60%)	10.66%	(11.08%)								
1952*	1,344,962	(553,862)	(11,919)	0	(1,265,915)	10,814,013	2.60%	(1.38%)	4.04%								
1953	1,462,734	(666,186)	(12,101)	0	341,695	11,940,155	3.05%	0.00%	3.05%								
1954	1,611,842	(690,616)	(15,320)	0	341,770	13,187,831	2.76%	0.00%	2.76%								
1955	1,663,647	(773,936)	(12,476)	0	434,896	14,499,962	3.19%	0.47%	2.71%								
1956	1,790,935	(859,146)	(13,597)	0	384,823	15,802,977	2.57%	3.24%	(0.65%)								
1957	2,130,165	(798,404)	(19,480)	0	523,979	17,639,237	3.18%	1.79%	1.37%								
1958*	2,395,882	(917,013)	(23,360)	0	764,898	19,859,644	4.16%	2.64%	1.48%								
1959*	2,661,599	(1,035,623)	(27,240)	0	1,039,120	22,497,500	5.03%	1.29%	3.69%								
1960	4,144,352	(1,154,232)	(31,120)	0	1,246,736	16,703,236	5.20%	1.27%	3.88%								
1961	2,927,316	(1,403,725)	(28,990)	0	1,485,022	29,682,859	5.41%	0.42%	4.97%								
1962	3,196,204	(1,605,710)	(28,171)	0	1,668,806	32,913,968	5.48%	1.67%	3.75%								
1963	3,558,599	(1,759,225)	(36,677)	0	1,873,563	36,550,248	5.54%	1.64%	3.84%								
1964*	3,877,559	(2,219,502)	(38,149)	0	1,979,089	40,149,245	5.30%	2.02%	3.22%								
1965*	3,160,279	(2,014,266)	(29,849)	0	1,570,949	42,836,358	3.86%	3.16%	0.68%								
1966	3,725,529	(3,651,008)	(52,977)	0	2,274,524	45,132,426	5.31%	3.45%	1.80%								
1967	4,369,950	(2,643,540)	(48,180)	0	2,449,109	49,259,765	5.33%	4.07%	1.21%								
1968	5,053,832	(2,676,421)	(64,800)	0	2,701,658	54,274,034	5.36%	3.91%	1.40%								
1969	5,854,684	(3,005,217)	(75,977)	0	3,091,166	60,138,690	5.55%	4.79%	0.73%								
1970	6,680,379	(3,486,690)	(94,068)	0	4,980,327	68,218,638	8.07%	1.31%	6.67%								
1971	7,799,868	(4,149,289)	(104,499)	0	4,261,235	76,025,953	6.09%	5.16%	0.88%								
1972	9,167,547	(4,838,136)	(143,101)	0	6,082,486	86,294,749	7.79%	4.91%	2.75%								
1973	10,468,999	(5,931,048)	(144,955)	0	5,923,884	96,611,629	6.69%	9.36%	(2.44%)								
1974	13,415,988	(7,519,676)	(187,266)	0	7,034,969	109,355,644	7.07%	12.30%	(4.66%)								
1975	17,478,089	(8,729,977)	(277,474)	0	8,459,738	126,286,020	7.45%	9.52%	(1.89%)								
1976	21,560,004	(10,893,728)	(328,456)	0	10,454,455	147,078,295	7.95%	5.91%	1.93%								
1977	25,723,575	(12,527,475)	(420,893)	0	12,779,529	172,633,031	8.33%	9.46%	(1.03%)								
1978	28,820,421	(15,566,709)	(464,754)	(267)	16,514,075	201,935,797	9.22%	8.36%	0.79%								
1979	30,972,133	(18,939,495)	(426,237)	(5,006)	20,277,643	233,814,835	9.76%	9.80%	(0.04%)								
1980	35,610,583	(22,105,591)	(501,376)	(7,389)	24,502,748	271,313,810	10.19%	11.19%	(0.90%)								
1981	40,077,511	(24,347,203)	(562,043)	(16,508)	30,878,819	317,344,386	11.07%	12.10%	(0.92%)								
1982	46,310,086	(26,696,402)	(574,946)	(20,929)	39,173,814	375,536,009	11.98%	9.26%	2.49%								
1983	55,246,946	(32,486,301)	(1,649,451)	(13,059)	46,079,767	442,713,911	11.93%	4.55%	7.06%								
1984	55,247,692	(41,641,651)	(726,172)	(81,599)	52,113,402	507,625,583	11.58%	3.76%	7.54%								
1985	60,726,998	(44,840,057)	(769,761)	(115,395)	60,619,735	583,247,103	11.74%	4.35%	7.08%								
1986	66,731,516	(51,745,686)	(701,556)	(214,827)	67,587,082	664,903,632	11.41%	4.17%	6.95%								
1987	74,154,000	(60,044,000)	(958,000)	(22,000)	71,783,368	749,817,000	10.69%	4.15%	6.28%								
1988	82,966,000	(68,349,000)	(1,127,000)	(722,000)	30,951,000	793,536,000	4.00%	4.00%	0.00%								
1989	87,444,000	(75,248,000)	(1,233,000)	(1,067,000)	141,327,000	944,759,000	17.55%	5.13%	11.81%								
1990	95,317,000	(87,829,000)	(818,000)	(1,198,000)	94,997,000	1,045,228,000	9.89%	5.00%	4.66%								
1991	104,335,000	(93,946,000)	(670,000)	(1,364,000)	180,752,000	1,234,335,000	17.08%	3.78%	12.82%								
1992	107,405,000	(115,873,000)	(791,000)	(1,290,000)	93,632,000	1,317,418,000	7.51%	2.14%	5.26%								
1993	114,699,000	(119,806,000)	(900,000)	(1,116,000)	230,089,000	1,540,384,000	17.42%	1.70%	15.46%								
1994	117,886,000	(129,598,000)	(969,000)	(1,520,000)	3,382,000	1,529,565,000	0.12%	0.23%	(0.11%)								
1995	121,492,000	(137,521,000)	(894,000)	(1,845,000)	252,094,000	1,762,881,000	16.45%	1.75%	14.45%								
1996	127,112,000	(151,650,000)	(982,000)	(2,777,000)	239,112,000	1,973,706,000	13.50%	2.17%	11.09%								
1997***	104,920,000	(546,688,000)	(736,000)	(2,117,000)	166,119,000	1,695,204,000	9.36%	0.73%	8.57%								
1998	122,261,000	(129,544,000)	(785,000)	(1,981,000)	142,888,000	1,828,043,000	8.33%	1.05%	7.20%								
1999	115,219,000	(135,216,000)	(712,000)	(2,398,000)	139,931,000	1,944,867,000	7.57%	2.58%	4.86%								
2000	125,361,000	(147,650,000)	(964,000)	(2,664,000)	193,804,000	2,112,754,000	9.89%	3.23%	6.45%								
2001	136,764,000	(156,626,000)	(845,000)	(2,164,000)	107,407,000	2,197,290,000	5.01%	0.70%	4.28%								
2002	149,320,000	(168,974,000)	(1,037,000)	(2,490,000)	30,846,000	2,204,955,000	1.30%	3.88%	(2.48%)								
2003	155,824,000	(179,152,000)	(1,274,000)	(3,142,000)	293,631,000	2,470,842,000	13.25%	1.99%	11.04%								
2004	167,480,000	(194,500,000)	(1,283,000)	(4,019,000)	333,733,000	2,772,253,000	13.42%	2.12%	11.07%								
2005	191,600,000	(213,939,000)	(1,478,000)	(4,312,000)	398,284,000	3,142,408,000	14.27%	2.15%	11.86%								
2006	212,647,000	(237,555,000)	(1,540,000)	(4,035,000)	397,998,000	3,509,923,000	12.59%	1.64%	10.77%								
2007	214,854,000	(260,704,000)	(1,482,000)	(5,459,000)	130,119,000	3,587,251,000	3.58%	2.38%	1.17%								
	\$ 3,324,497,375	\$ (3,779,134,325)	\$ (30,232,448)	\$ (48,176,979)	\$ 4,115,274,469		6.94%	4.03%	2.89%								

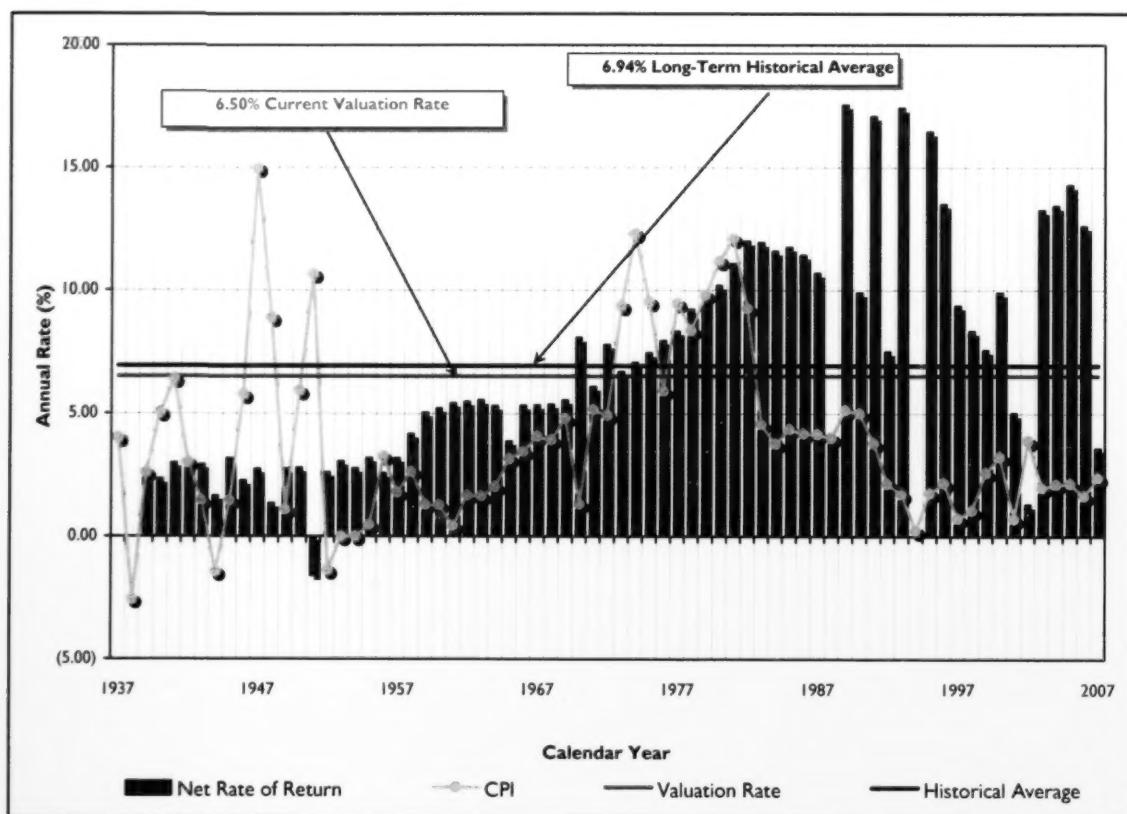
\* Some numbers in 1958, 1959, and 1964 were estimated. 1946 is an 11-month "year", and 1965 is a 9-month "year". (Adjusted Book Value" 1939-1990 | Market Value: 1991-2007). In 1948, 1951 and 1952 transfers to reserves for possible future losses on account of investment principal were made, and special adjustments under the Act occurred.

\*\* Years 1939 to 1945 commenced on May 1, years 1946 to 1964 commenced on April 1. Thereafter, calendar years are reported.

\*\*\* The large decrease in assets in 1997 was due to the privatization of MTS.

\*\*\*\* Rates of return are arithmetical and are calculated on the basis of mid-year cashflow.

The volatility in recent asset values is due to the Auditor's requirement that market values be reported. Previously, adjusted book values were used. The Valuation Balance Sheet separately reflects a smoothing asset adjustment reserve to partially mitigate or neutralize this volatility.



**4. Membership Summary (records processed for liability calculations)**

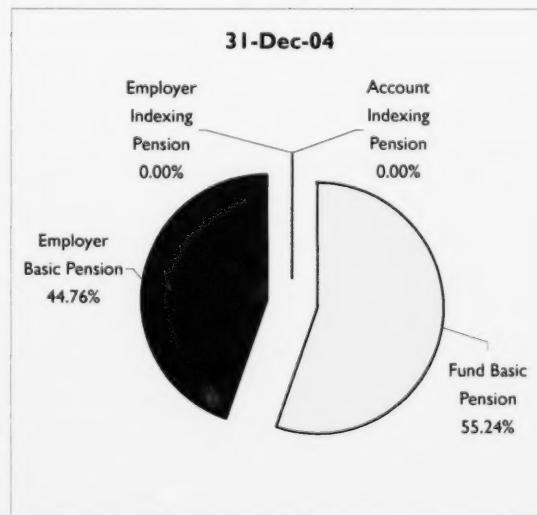
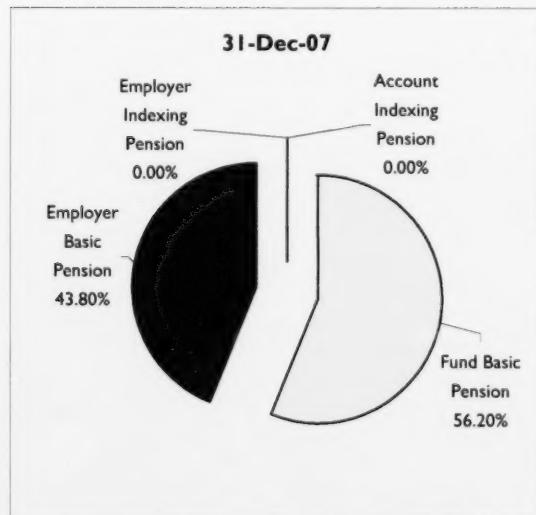
Category	31-Dec-07			31-Dec-04		
	Males	Females	Total	Males	Females	Total
Active Participants	14,056	13,251	27,307	13,992	12,769	26,761
Other Participants						
- Long-Term Disability	42	117	159	55	125	180
- Deferred Annuities	1,180	1,420	2,600	1,190	1,359	2,549
- Transfers (RA & RM)	83	58	141	110	70	180
	1,305	1,595	2,900	1,355	1,554	2,909
Pensions in Payment						
- Pensioners	7,777	4,639	12,416	6,974	3,868	10,842
- Survivors	225	2,272	2,497	177	2,061	2,238
	8,002	6,911	14,913	7,151	5,929	13,080
Total	23,363	21,757	45,120	22,498	20,252	42,750

	31-Dec-07			31-Dec-04		
	Fund			Fund		
	Average	Monthly	Pension	Average	Monthly	Pension
	Number	Age		Number	Age	
Active Participants	27,307	44.93	\$ 531.66	26,761	44.63	\$ 476.31
Other Participants	2,900	48.34	218.49	2,909	47.81	224.03
Pensions in Payment	14,913	69.79	639.89	13,080	69.34	580.84
Total	45,120	53.37	\$ 547.30	42,750	52.41	\$ 491.13

- The active participant average monthly pension which is the responsibility of the Fund has been estimated from salary and service data as these participants have not yet retired, disabled, terminated, or died and therefore have not had their pension determined explicitly by the Board. The amounts shown in the prior Report have been restated for such participants.
- The total membership counts shown in the Report are different from the amounts reported in the General Manager's Report due to additional new entrants, retirements, disablements, terminations, and deaths following December 31, 2007 that were provided by the staff of the Board.
- This Report is in respect of Fund obligations. The Fund average monthly pension has been shown above which represents approximately 55% of the total pensions paid to participants prior to reflecting indexing. Additional information is shown on the following pages that detail Fund pension amounts as well as the pension amounts payable outside the Fund by the Indexing Benefits Account and the pay-as-you-go employers. The valuation of the obligations not belonging to the Fund are reported separately.

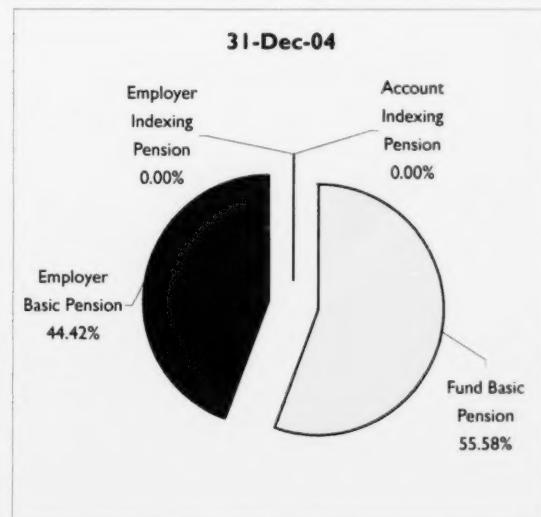
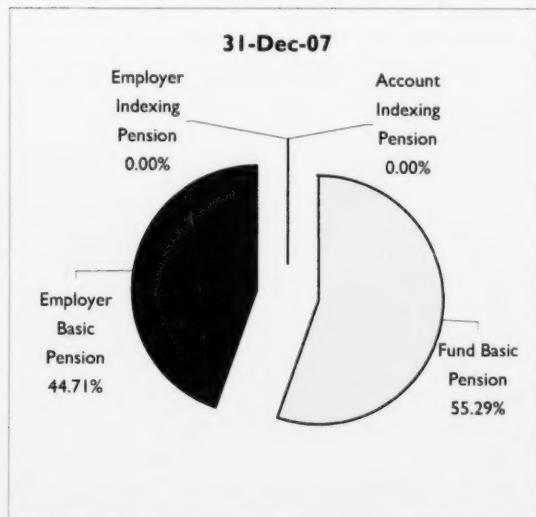
**5. Active Participants Age Profile** (This Report is in respect of Fund obligations only. Employer in the information below refers to pay-as-you-go employers. The Fund includes matching employer pension information.)

Age Band	Number	Average Monthly Pension						Total	
		Basic Pension		Indexing					
		Fund	Employer	Employer	Account				
15 - 19	40	\$ 8.39	\$ 6.30	\$ -	\$ -			\$ 14.69	
20 - 24	861	32.93	23.25	-	-			56.18	
25 - 29	1,922	95.15	68.23	-	-			163.38	
30 - 34	2,608	175.19	127.05	-	-			302.24	
35 - 39	3,071	277.41	201.66	-	-			479.07	
40 - 44	4,134	458.45	347.55	-	-			806.00	
45 - 49	4,796	588.03	454.82	-	-			1,042.85	
50 - 54	5,111	810.12	635.25	-	-			1,445.37	
55 - 59	3,328	875.22	701.66	-	-			1,576.88	
60 - 64	1,256	855.06	692.06	-	-			1,547.12	
65 - 69	180	861.51	804.66	-	-			1,666.17	
70 - 74	-	-	-	-	-			-	
75 - 79	-	-	-	-	-			-	
80 - 84	-	-	-	-	-			-	
85 - 89	-	-	-	-	-			-	
90 - 94	-	-	-	-	-			-	
95 - 99	-	-	-	-	-			-	
100 - 104	-	-	-	-	-			-	
31-Dec-07	<u><u>27,307</u></u>	<u><u>\$ 531.66</u></u>	<u><u>\$ 414.40</u></u>	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>			<u><u>\$ 946.06</u></u>	
31-Dec-04	<u><u>26,761</u></u>	<u><u>\$ 476.31</u></u>	<u><u>\$ 386.00</u></u>	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>			<u><u>\$ 862.31</u></u>	



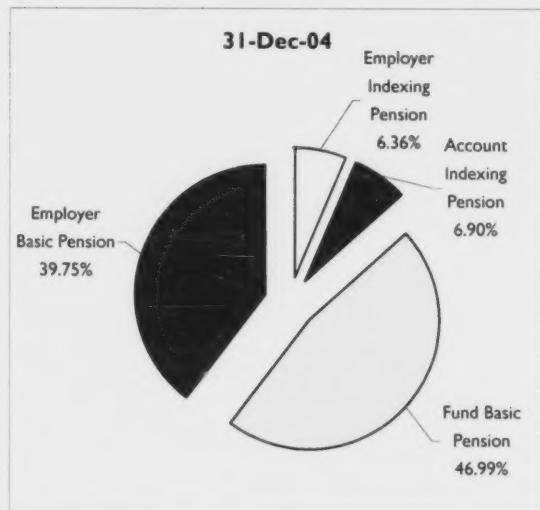
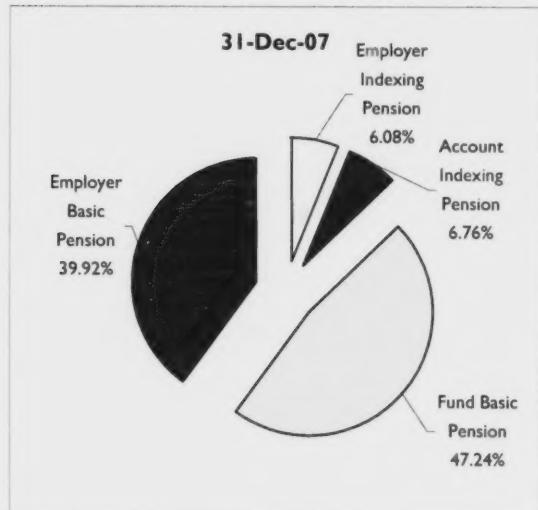
**6. Other Participants Age Profile** (This Report is in respect of Fund obligations only. Employer in the information below refers to pay-as-you-go employers. The Fund includes matching employer pension information.)

Age Band	Number	Average Monthly Pension						Total	
		Basic Pension		Indexing					
		Fund	Employer	Employer	Account				
15 - 19	-	\$ -	\$ -	\$ -	\$ -			\$ -	
20 - 24	4	63.42	49.45	-	-			112.87	
25 - 29	50	65.50	47.93	-	-			113.43	
30 - 34	121	82.98	58.34	-	-			141.32	
35 - 39	219	129.34	95.44	-	-			224.78	
40 - 44	407	173.82	124.87	-	-			298.69	
45 - 49	684	217.63	176.50	-	-			394.13	
50 - 54	774	301.03	239.51	-	-			540.54	
55 - 59	411	239.06	224.59	-	-			463.65	
60 - 64	207	175.83	139.01	-	-			314.84	
65 - 69	22	198.70	172.55	-	-			371.25	
70 - 74	1	91.34	-	-	-			91.34	
75 - 79	-	-	-	-	-			-	
80 - 84	-	-	-	-	-			-	
85 - 89	-	-	-	-	-			-	
90 - 94	-	-	-	-	-			-	
95 - 99	-	-	-	-	-			-	
100 - 104	-	-	-	-	-			-	
31-Dec-07	<u>2,900</u>	<u>\$ 218.49</u>	<u>\$ 176.68</u>	<u>\$ -</u>	<u>\$ -</u>			<u>\$ 395.17</u>	
31-Dec-04	<u>2,909</u>	<u>\$ 224.03</u>	<u>\$ 179.02</u>	<u>\$ -</u>	<u>\$ -</u>			<u>\$ 403.05</u>	



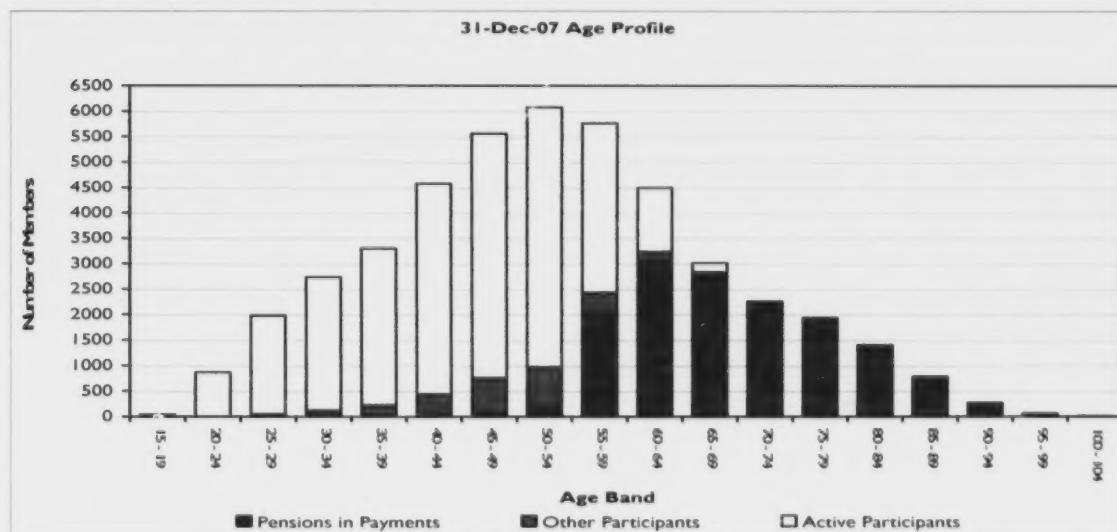
**7. Pensions in Payment Age Profile** (This Report is in respect of Fund obligations only. Employer in the information below refers to pay-as-you-go employers. The Fund includes matching employer pension information.)

Age Band	Number	Average Monthly Pension					
		Basic Pension		Indexing		Employer	Account
		Fund	Employer	Employer	Account		
15 - 19	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 - 24	-	-	-	-	-	-	-
25 - 29	1	120.47	94.57	2.12	2.35	219.51	
30 - 34	3	175.72	159.81	0.66	0.84	337.03	
35 - 39	7	280.33	202.09	7.25	8.97	498.64	
40 - 44	35	364.41	314.02	9.67	12.12	700.22	
45 - 49	81	317.35	277.00	15.45	18.81	628.61	
50 - 54	197	386.99	544.99	21.05	21.68	974.71	
55 - 59	2,026	943.89	796.12	15.17	17.65	1,772.83	
60 - 64	3,027	875.29	735.43	43.13	51.32	1,705.17	
65 - 69	2,812	674.72	561.04	70.05	81.36	1,387.17	
70 - 74	2,257	553.39	453.94	98.80	111.77	1,217.90	
75 - 79	1,940	456.95	395.12	124.25	135.91	1,112.23	
80 - 84	1,405	381.33	319.70	147.32	159.57	1,007.92	
85 - 89	786	292.85	265.40	170.81	176.80	905.86	
90 - 94	271	198.70	172.50	164.52	174.99	710.71	
95 - 99	58	170.86	161.77	218.14	218.51	769.28	
100 - 104	7	147.07	180.75	126.04	132.60	586.46	
31-Dec-07	<u>14,913</u>	<u>\$ 639.89</u>	<u>\$ 540.85</u>	<u>\$ 82.31</u>	<u>\$ 91.62</u>	<u>\$ 1,354.67</u>	
31-Dec-04	<u>13,080</u>	<u>\$ 580.84</u>	<u>\$ 491.40</u>	<u>\$ 78.65</u>	<u>\$ 85.22</u>	<u>\$ 1,236.11</u>	



**8. Total Membership Age Profile** (This Report is in respect of Fund obligations only. Employer in the information below refers to pay-as-you-go employers. The Fund includes matching employer pension information.)

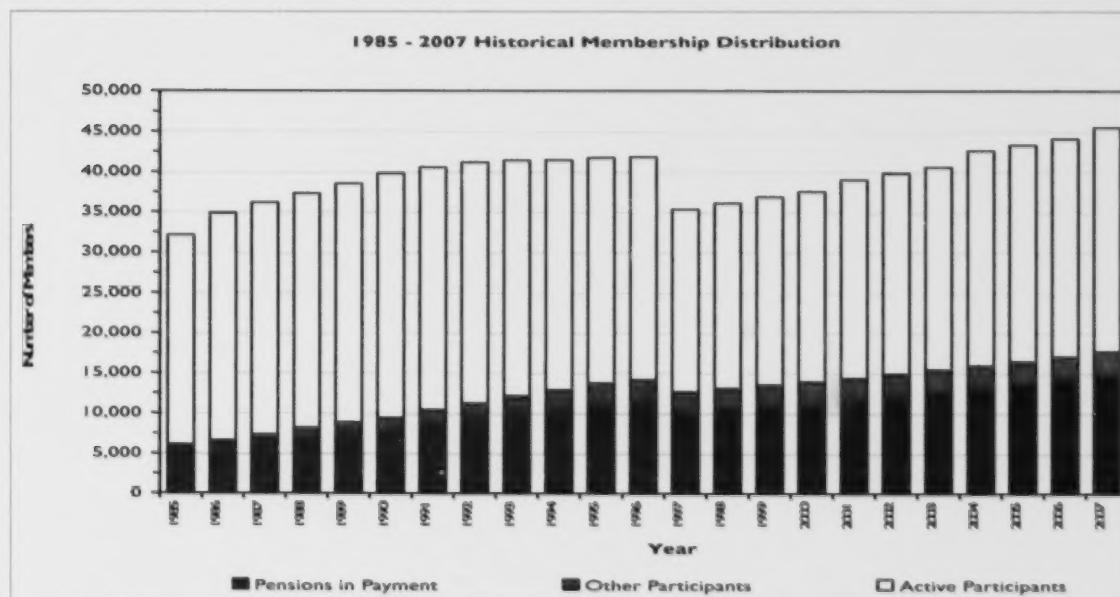
Age Band	Number	Average Monthly Pension						Total	
		Basic Pension		Indexing		Employer	Account		
		Fund	Employer	Employer	Account				
15 - 19	40	\$ 8.39	\$ 6.30	\$ -	\$ -			\$ 14.69	
20 - 24	865	33.07	23.37	-	-			56.44	
25 - 29	1,973	94.41	67.73	0.00	0.00			162.14	
30 - 34	2,732	171.11	124.04	0.00	0.00			295.15	
35 - 39	3,297	267.58	194.61	0.02	0.02			462.22	
40 - 44	4,576	432.42	327.49	0.07	0.09			760.07	
45 - 49	5,561	538.53	418.00	0.23	0.27			957.02	
50 - 54	6,082	731.63	581.96	0.68	0.70			1,314.98	
55 - 59	5,765	854.00	700.84	5.33	6.20			1,566.38	
60 - 64	4,490	837.38	695.80	29.08	34.60			1,596.86	
65 - 69	3,014	682.40	572.75	65.36	75.91			1,396.42	
70 - 74	2,258	553.19	453.74	98.76	111.72			1,217.40	
75 - 79	1,940	456.95	395.12	124.25	135.91			1,112.23	
80 - 84	1,405	381.33	319.70	147.32	159.57			1,007.92	
85 - 89	786	292.85	265.40	170.81	176.80			905.86	
90 - 94	271	198.70	172.50	164.52	174.99			710.71	
95 - 99	58	170.86	161.77	218.14	218.51			769.28	
100 - 104	7	147.07	180.75	126.04	132.60			586.46	
31-Dec-07	45,120	\$ 547.30	\$ 440.92	\$ 27.20	\$ 30.28			\$ 1,045.70	
31-Dec-04	42,750	\$ 491.13	\$ 404.16	\$ 24.06	\$ 26.07			\$ 945.43	



**9. Membership Distribution by Year** (extracted from General Manager's Report)

Year	Participants			Pensions in Payment				Grand Total
	Actives	Other	Total	Pensioners	Beneficiaries	Spouses	Total	
1985	26,027	454	26,481	4,830	456	355	5,641	32,122
1986	28,182	568	28,750	5,191	489	370	6,050	34,800
1987	28,832	794	29,626	5,614	529	398	6,541	36,167
1988	29,107	1,153	30,260	6,003	597	423	7,023	37,283
1989	29,665	1,370	31,035	6,368	663	444	7,475	38,510
1990	30,350	1,562	31,912	6,670	719	482	7,871	39,783
1991	30,106	1,864	31,970	7,254	798	514	8,566	40,536
1992	29,921	2,058	31,979	7,739	870	545	9,154	41,133
1993	29,209	2,344	31,553	8,356	930	542	9,828	41,381
1994	28,544	2,608	31,152	8,679	1,031	558	10,268	41,420
1995	27,952	2,885	30,837	9,165	1,113	591	10,869	41,706
1996	27,629	2,705	30,334	9,690	1,188	604	11,482	41,816
1997	22,658	2,774	25,432	8,308	1,060	528	9,896	35,328
1998	22,980	2,842	25,822	8,573	1,160	533	10,266	36,088
1999	23,350	2,827	26,177	8,883	1,279	535	10,697	36,874
2000	23,575	2,933	26,508	9,096	1,313	590	10,999	37,507
2001	24,640	2,961	27,601	9,446	1,438	549	11,433	39,034
2002	24,885	2,982	27,867	9,874	1,509	542	11,925	39,792
2003	25,136	2,996	28,132	10,322	1,587	545	12,454	40,586
2004	26,659	2,952	29,611	10,772	1,674	553	12,999	42,610
2005	26,792	2,958	29,750	11,225	1,747	556	13,528	43,278
2006	27,031	2,974	30,005	11,704	1,829	568	14,101	44,106
2007	27,772	2,932	30,704	12,354	1,886	572	14,812	45,516 *

\*The 45,120 membership records processed for liability calculations is less than the 45,516 shown in the above table largely due to the exclusion of approximately 432 records who had terminated and had not elected their benefit option. These records are held as account payables in the other participant liability amounts held on the Valuation Balance Sheet.



## 10. Reconciliation

### ▪ Participant Reconciliation (extracted from General Manager's Report)

Year	Jan. 1	Entered*	Withdrew	Retired	Disabled	Died	Dec. 31
1985	25,673	2,271	(908)	(468)	(28)	(59)	26,481
1986	26,481	3,857	(1,028)	(489)	(29)	(42)	28,750
1987	28,750	2,787	(1,272)	(541)	(52)	(46)	29,626
1988	29,626	2,655	(1,387)	(536)	(52)	(46)	30,260
1989	30,260	2,710	(1,307)	(528)	(49)	(51)	31,035
1990	31,035	2,718	(1,273)	(470)	(50)	(48)	31,912
1991	31,912	2,311	(1,389)	(768)	(42)	(54)	31,970
1992	31,970	1,844	(1,125)	(640)	(31)	(39)	31,979
1993	31,979	1,739	(1,296)	(808)	(31)	(30)	31,553
1994	31,553	1,438	(1,189)	(575)	(32)	(43)	31,152
1995	31,152	1,675	(1,324)	(569)	(30)	(67)	30,837
1996	30,837	2,353	(1,992)	(763)	(54)	(47)	30,334
1997	30,334	(3,272)	(1,082)	(478)	(41)	(29)	25,432
1998	25,432	2,155	(1,182)	(494)	(47)	(42)	25,822
1999	25,822	2,040	(991)	(585)	(52)	(57)	26,177
2000	26,177	2,024	(1,105)	(505)	(48)	(35)	26,508
2001	26,508	2,803	(1,017)	(598)	(35)	(60)	27,601
2002	27,601	2,068	(1,016)	(683)	(56)	(47)	27,867
2003	27,867	1,993	(909)	(710)	(68)	(41)	28,132
2004	28,132	3,196	(858)	(751)	(60)	(48)	29,611
2005	29,611	2,074	(1,060)	(755)	(63)	(57)	29,750
2006	29,750	2,388	(1,251)	(777)	(63)	(42)	30,005
2007	30,005	2,946	(1,172)	(948)	(65)	(62)	30,704 **
			<u>48,773</u>	<u>(27,133)</u>	<u>(14,439)</u>	<u>(1,078)</u>	<u>(1,092)</u>

### ▪ Pensioner (excludes survivors) Reconciliation (extracted from General Manager's Report)

Year	Jan. 1	Other*	Retired	Disabled	Died	Dec. 31
1985	4,519	-	468	28	(185)	4,830
1986	4,830	1	489	29	(158)	5,191
1987	5,191	-	541	52	(170)	5,614
1988	5,614	(6)	536	52	(193)	6,003
1989	6,003	(9)	528	49	(203)	6,368
1990	6,368	(18)	470	50	(200)	6,670
1991	6,670	5	768	42	(231)	7,254
1992	7,254	34	640	31	(220)	7,739
1993	7,739	12	808	31	(234)	8,356
1994	8,356	-	575	32	(284)	8,679
1995	8,679	142	569	30	(255)	9,165
1996	9,165	-	763	54	(292)	9,690
1997	9,690	(1,649)	478	41	(252)	8,308
1998	8,308	16	494	47	(292)	8,573
1999	8,573	-	585	52	(327)	8,883
2000	8,883	(20)	505	48	(320)	9,096
2001	9,096	(1)	598	35	(282)	9,446
2002	9,446	(8)	683	56	(303)	9,874
2003	9,874	(24)	710	68	(306)	10,322
2004	10,322	(24)	751	60	(337)	10,772
2005	10,772	(29)	755	63	(336)	11,225
2006	11,225	(28)	777	63	(333)	11,704
2007	11,704	(23)	948	65	(340)	12,354 **
		<u>(1,629)</u>	<u>14,439</u>	<u>1,078</u>	<u>(6,053)</u>	

\* This category reflects other adjustments. For example, in 1997, this category reflects the privatization of MTS.

\*\* The actual number of participants and pensioners processed for liability calculations is different from the amount shown in the above table, largely due to the exclusion of approximately 432 records that had terminated and had not elected their benefit option, or who had retired, or died after the completion of the General Manager's Report. These records are held as account payables or as survivors on the Valuation Balance Sheet.

## II. Membership Distribution by Employer

Name of Employer	Code	Active Participants	Other Participants	Pensions in Payment	2007 Total
<b>Non-Matching Employers</b>					
1 Province of Manitoba Civil Service	CS	14,353	2,025	9,808	26,186
2 Manitoba Hydro - Electric Board	MH	5,331	219	2,501	8,051
3 Manitoba Public Insurance	AI/AIE	1,546	130	399	2,075
4 Division of Driver and Vehicle Licensing	AIL	232	2	26	260
5 Red River College	RCC	1,150	77	343	1,570
6 Liquor Control Commission	LC	575	60	345	980
7 Addictions Foundation of Manitoba	AF	307	31	121	459
8 Assiniboine Community College	ACC	299	29	89	417
9 University College of The North	KCC	250	30	56	336
10 The Legal Aid Services Society of Manitoba	LA	127	14	22	163
11 Manitoba Centennial Centre Corporation	CC	52	7	67	126
12 Teachers' Retirement Allowance Fund Board	TR	28	5	8	41
13 Communities Economic Development Fund	CE	15	2	8	25
14 The Council on Post-Secondary Education	UG	11	1	12	24
15 Manitoba Horse Racing Commission	RC	4	1	4	9
16 Diagnostic Services of Manitoba	DSM	2	-	-	2
17 Regional Health Authority - Winnipeg	RWA	210	20	82	312
18 Regional Health Authority - Brandon	RBH	210	14	98	322
19 Regional Health Authority - Central	RCA	100	4	41	145
20 Regional Health Authority - Assiniboine	ARH et al	91	3	30	124
21 Regional Health Authority - Parkland	RPL	66	9	31	106
22 Regional Health Authority - Interlake	RIL	72	3	32	107
23 Regional Health Authority - South Eastman	RSE	28	2	8	38
24 Regional Health Authority - Nor-Man	RNF/RNM	23	6	7	36
25 Regional Health Authority - North Eastman	RNE	23	-	13	36
26 Regional Health Authority - Burntwood	RBW	12	5	3	20
27 Money Purchase Plan Annuity	MPP	-	-	111	111
28 Workers' Compensation Board	WC	-	-	2	2
29 WECO	WEC	-	-	73	73
		<b>25,117</b>	<b>2,699</b>	<b>14,340</b>	<b>42,156</b>
<b>Matching Employers</b>					
1 Manitoba Lotteries Corporation	LF	1,097	21	42	1,160
2 Manitoba Housing Authority	HA	310	41	165	516
3 Manitoba Agricultural Services Corporation	MAS/AC	159	13	41	213
4 Manitoba Crop Insurance Corporation	CIC/CIC	124	29	145	298
5 Manitoba Government and General Employees' Union	EA	74	3	28	105
6 Manitoba Hydro Utilities Service	MHU	65	-	-	65
7 Child and Family All Nations Coordinated Network	ANR	62	-	-	62
8 The Civil Service Superannuation Board	SB	51	9	15	75
9 Gaming Control Commission	GC	52	-	8	60
10 Travel Manitoba	TM	34	1	4	39
11 Food Development Centre	FD	27	4	2	33
12 Manitoba Floodway Expansion Authority Inc.	MFA	27	1	-	28
13 Dairy Farmers of Manitoba	MC	20	5	10	35
14 Industrial Technology Centre	IT	20	6	6	32
15 Manitoba Pork Marketing Co-Op Inc.	HM	15	6	19	40
16 Manitoba Film and Sound	MFS	10	-	-	10
17 Manitoba Pork Council	PC	10	1	5	16
18 Manitoba Arts Council	MA	6	1	4	11
19 Manitoba Chicken Producer Board	CB	5	-	1	6
20 Sport Manitoba	SM	5	1	1	7
21 Crown Corporations Council	CR	4	-	4	8
22 Manitoba Cattle Enhancement Council	MCE	3	-	-	3
23 Manitoba Turkey Producers	TB	3	3	2	8
24 Paletta & Company Hotels	PCH	3	-	1	4
25 Venture Manitoba Tours Ltd.	VT	3	-	2	5
26 Economic Innovation and Technology Council	MR	1	35	22	58
27 Manitoba Development Corporation	DFP	-	2	9	11
28 Manitoba Hazardous Waste	HW	-	-	3	3
29 Manitoba Water Services Board	VWS	-	2	13	15
30 Human Resources and Employment Centre	R's/HE	-	8	14	22
31 Manitoba Beef Commission	BC	-	-	1	1
32 Local Government Districts	LG	-	-	2	2
33 Manitoba Mineral Resources Limited	MM	-	-	1	1
34 Manitoba Data Services	DS	-	4	3	7
35 No Billing (Charged to Fund)	NB	-	5	-	5
		<b>2,190</b>	<b>201</b>	<b>573</b>	<b>2,964</b>
31-Dec-07 Total Membership		<b>27,307</b>	<b>2,900</b>	<b>14,913</b>	<b>45,120</b>
31-Dec-04 Total Membership		<b>26,761</b>	<b>2,909</b>	<b>13,080</b>	<b>42,750</b>

## 12. Data Certification (Source: Staff of the Civil Service Superannuation Board)

- Active Participants: An electronic file which provided information for each active participant as at December 31, 2007. Details of the information provided included: employer code, social insurance number, employee number, sex, date of birth, date of entry into the Fund, annualized salary at December 31, 2007, salary rate at December 31, 2007, the proportion of 2007 worked, qualifying service, required employee contributions and total interest on these contributions accumulated to the valuation date. Any reductions in pension as a result of marriage break-up cases, which have been processed, were also provided. We had available copies of prior Actuarial Reports on the financial position of the Fund.

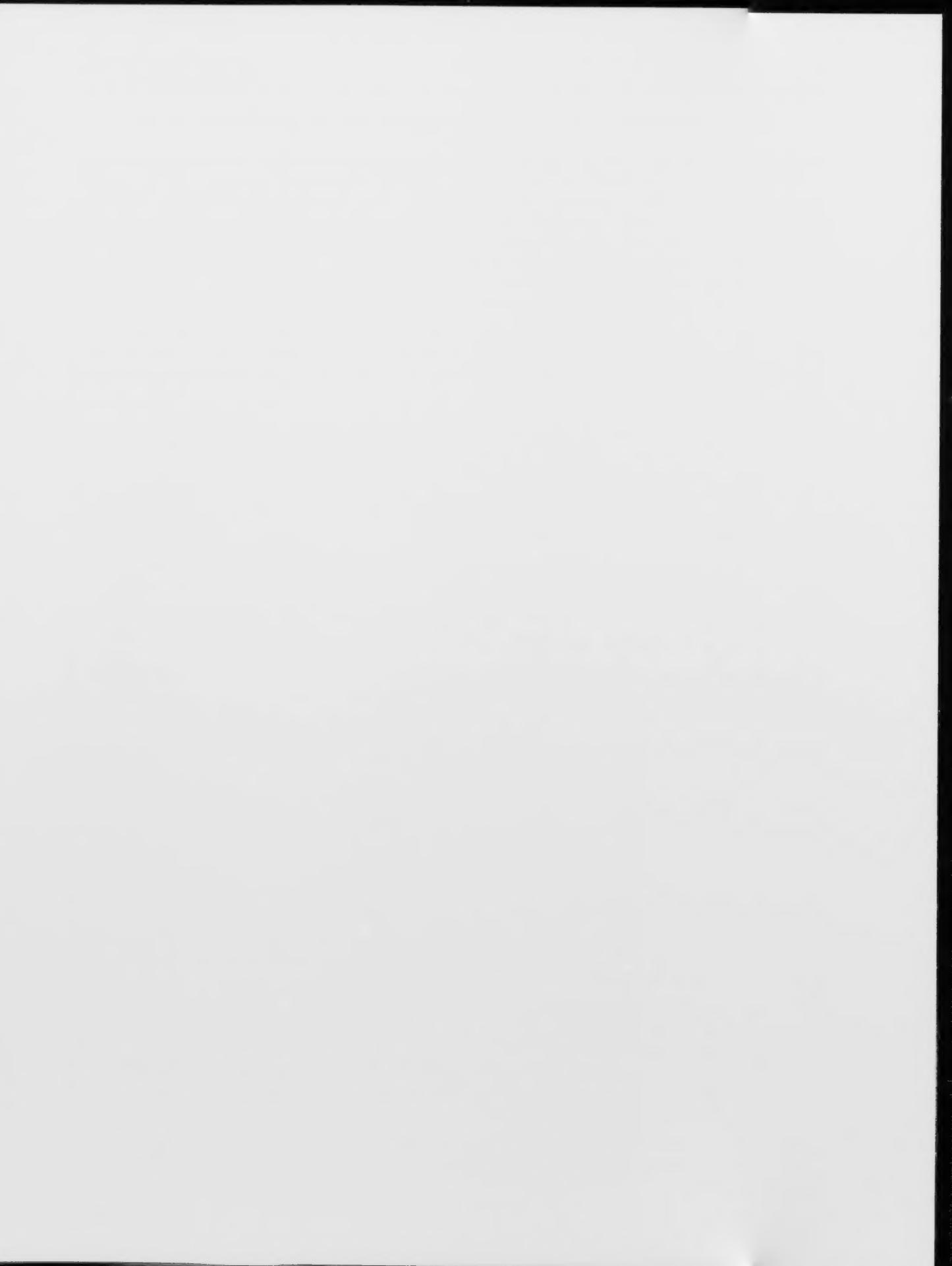
The file was checked for missing information. This check revealed that there were a few records that, for various reasons, such as approved leaves of absence, did not contain salary information for 2007. Average salary information for the remaining group was used to complete these records.

- Pensions in Payment: An electronic file which provided information for each pensioner as at December 31, 2007. Details of the information provided included: employer code, name, social insurance number, sex, date of birth, date of commencement of pension, type of pension, and amount of monthly pension. For each pensioner, the portion of the pension charged to the Fund, now and in the future, was also provided. Similar information was provided for each beneficiary or potential beneficiary.

The pensioner information was provided in 45,176 separate records (trailers) in respect of the 14,913 pensions in payment, which gave details on the pension payable from various sources.

Billing Type	Number	Basic Pension		Indexing	
		Fund	Employer	Employer	Account
A	48	\$ -	\$ 958.49	\$ 1,015.90	\$ -
B	30,792	\$ 9,606,860.33	\$ 7,914,761.28	\$ 1,210,381.47	\$ 1,351,748.00
C	2,582	(\$61,096.36)	(\$59,796.25)	-	-
D	7	591.49	-	-	-
F	2,039	26,720.91	18,736.74	750.64	1,012.24
I	586	43,949.03	27,702.48	-	-
J	1,826	44,559.87	15,825.12	3,848.40	6,497.15
K	63	-	73,528.56	1,596.21	-
L	699	534.32	101,601.26	-	-
M	20	-	463.93	6.31	-
N	293	-	94,759.14	3,714.38	-
O	4,456	(\$152,746.02)	(\$149,605.16)	-	-
P	1,620	31,907.23	12,887.28	4,663.36	7,007.54
Q	2	-	2.44	0.47	-
U	7	1,393.05	1,393.10	-	-
W	114	-	319.23	462.82	8.61
X	18	-	9,928.56	1,024.98	-
Y	4	-	2,280.72	-	-
	<b>45,176</b>	<b>\$ 9,542,673.85</b>	<b>\$ 8,065,746.92</b>	<b>\$ 1,227,464.94</b>	<b>\$ 1,366,273.54</b>
Average Monthly Pension		\$639.89	\$540.85	\$82.31	\$91.62

- The General Manager's and Chief Investment Officer's Reports for 2005, 2006, and 2007. These Reports included detailed lists of investments held and financial statements of the Fund, including balance sheets, and income and expenditure statements. The Annual Reports of the Superannuation Board for 2005, 2006, and 2007. A copy of the Act, with amendments, to December 31, 2007. We note that the 2004 surplus transfer to the Indexing Account had not yet occurred at the time of this Report.
- An electronic file containing the billing percentages to be used to allocate payments and liabilities amongst the participating employers pursuant to subsection 22(11) of the Act.







## APPENDIX II

### Summary of the Plan

The calculations in this Report are based on the Civil Service Superannuation Act (Act) as amended to the valuation date. The Civil Service Superannuation Board (Board) is responsible for administering the Act. The Fund is a contributory defined benefit final pay pension plan that covers eligible employees of the Province of Manitoba and its participating Agencies. The following is a brief summary of the benefits as they existed at the valuation date. For a more complete description of the benefits, reference should be made to the Act.

#### 1. Effective Date:

The Board and Fund were established under the Act in May, 1939.

#### 2. Recent Changes:

Effective January 1, 2001, the employee contribution rate will be 6.0% of pensionable earnings up to Canada Pension Plan (CPP) maximum pensionable earnings and 7.0% of pensionable earnings above the CPP maximum each year. On pensionable earnings up to the CPP maximum, the matching employer contribution rate remains the same at 5.1%.

Effective September 1, 2000, the Act was amended to provide benefit improvements. The most significant benefit improvement was to amend the pension formula to increase the pension benefits payable effective September 1, 2000 from 1.4% to 1.6% of average earnings below the average CPP maximum. There were also changes to buy back provisions respecting pensionable service as well as to other administrative matters. The cost of these benefit improvements will be funded by the Fund and by an increase in employee contribution rates.

**Employer Billings:** Effective January 1, 1998, pursuant to subsection 22(11) of the Act, employer funding for employees of more than one non-matching Agency shall be on a pro-rata basis in accordance with the portion of the amount paid or transferred to the employee in respect of which no employer matching contributions were made effective for events on or after January 1, 1998.

**Correctional Officers Rule of 75:** Effective November 19, 1996, employees who are members of the Province of Manitoba's Corrections Component are required to contribute an additional 1.00% of pensionable earnings. These additional contributions, which are credited to the Correctional Officers' Trust Account, are intended to fund the additional pension benefits for eligible employees who may retire as early as age 50 with no reduction for early retirement providing age and qualifying service are equal to a total of 75 or greater.

#### 3. Eligibility:

Each full-time employee of the Province or an Agency immediately begins to participate in the Fund.

Each part-time, temporary or term employee must become a participant upon completing 2 consecutive years of employment in which salary exceeds 25% of the Year's Maximum Pensionable Earnings as defined in the Interpretation Section of the Canada Pension Plan. Any such employee has the option to participate in the Fund any time after employment commences.

#### 4. Contributions:

The Fund is financed by contributions required to be made by employees who are participants in the Fund and by participating employers.

At December 31, 2007, the rates of required contributions for employees who are participants in the Fund were as follows:

	Employees	Matching Employers
On CPP portion of salary	6.00%	5.10%
On portion of salary in excess of CPP earnings	7.00%	7.00%

In accordance with the Act, 10.2% of the contributions are allocated to the Indexing Benefits Account.

Some of the participating employers are "matching" the contributions made by their employees. The remaining employers are financing their portion of benefits on a pay-as-you-go basis. Correctional Officers are required to contribute an additional 1.00% of salary.

#### 5. Pension Formula:

The lifetime pension formula equals:

- 2.00% of a member's best 5-year average pensionable earnings multiplied by pensionable service, minus
- .4% of the average Canada Pension Plan's earnings for the same period multiplied by pensionable service since January 1, 1966.

The lifetime pension is subject to an overall maximum of 70% of the average earnings plus the pension which can be provided by the .2% benefit improvement which was effective September 1, 2000. Some pensions for members retiring prior to age 60 are subject to an early retirement reduction.

#### 6. Retirement:

A participant receives an unreduced pension if such a participant retires on the last day of the calendar year in which the member attains age 69; on or after age 65 with one year of qualifying service; on or after age 60 with 10 years of qualifying service; or on or after age 55 if age plus qualifying service is equal to 80.

A participant is eligible to receive a reduced pension if such a participant retires on or after age 55 having completed 10 years of qualifying service.

Eligible members of the Province of Manitoba's Corrections Component may retire as early as age 50 if their age plus qualifying service total 75 or more.

The pension is paid for as long as a retired participant lives. If the participant dies before the total of the pension payments is at least equal to the participant's contributions with interest, the excess amount of these contributions over the pension payments made is paid to the participant's beneficiary or estate, whichever is applicable.

If the participant has a spouse at the date of retirement, a joint annuity is payable during the lives of the participant and the spouse. This annuity is reduced by one-third on the death of the

participant. This annuity is reduced so that it is actuarially equivalent in value to the pension that would otherwise be payable. This form of payment is also guaranteed so that the total payments are at least equal to the participant's contributions with interest.

This form of payment can be waived if the spouse signs the appropriate waiver form.

**7. Termination:**

Pension entitlements are protected (vested) for participants with 2 or more years of qualifying service. This type of protection applies from January 1, 1985. These entitlements are portable and may be transferred to another pension plan or to a suitable locked-in vehicle. Calculation of a commuted value of pension in respect of service on and after January 1, 1985 is performed at the time of termination, death, or retirement. A test is made to ensure that the participant's required contributions plus interest (less 10.2% allocated to the Indexing Benefits Account) provide no more than 50% of the benefit. This test may cause an additional benefit to be paid for service on or after January 1, 1985.

Pension entitlements for service prior to January 1, 1985 are protected for participants over age 45 with 10 or more years of qualifying service.

Where all or a portion of a participant's pension entitlements are not protected, the terminating participant may elect a cash settlement equal to the contributions with interest in respect of that portion.

**8. Disability:**

A participant who has 10 or more years of qualifying service, has not reached age 60 and suffers from a disability may apply for a disability allowance.

If the disability is total and permanent, the participant qualifies immediately for an allowance calculated as a normal retirement pension.

Average annual salaries are determined at the date of disablement.

**9. Death:**

If a participant dies prior to retirement and has not completed 2 years of qualifying service, the death benefit is a cash settlement equal to the participant's contributions with interest.

If a participant dies prior to retirement and has completed 2 years but not 10 years of qualifying service, the death benefits are equal to:

- the participant's contributions with interest for service prior to January 1, 1985, and
- the commuted value of the participant's accrued pension for service on and after January 1, 1985. This amount may be paid as an annuity if there is a surviving spouse.

If a participant dies prior to retirement and has completed 10 years of qualifying service, the participant's spouse receives an annuity equal to 60% of the participant's accrued pension. The value of the spouse's annuity must be at least equal to the commuted value of the participant's accrued pension for service on and after January 1, 1985.

If a participant dies prior to retirement and has completed 10 years of qualifying service but there is no surviving spouse, the death benefit is equal to the participant's contributions with

interest. The value of the death benefit must be at least equal to the commuted value of the participant's accrued pension for service on and after January 1, 1985.

If there are also eligible survivors, the annuity will be guaranteed for 10 years. If there is no spouse but there is(are) eligible survivor(s), the annuity will be guaranteed up to a maximum of 10 years.

If the participant dies prior to retirement and does not have a spouse or eligible survivor(s), the death benefit is a cash settlement equal to the participant's contributions with interest for service prior to January 1, 1985 and equal to at least the commuted value of the participant's accrued pension for service on and after January 1, 1985.

#### **10. Indexing:**

**Post-retirement:** Increases to pensions in payment of up to 2/3 of the change in the Consumer Price Index (CPI) are granted if there is a sufficient amount available in the Indexing Benefits Account and there is an increase in the cost of living. A separate report has been prepared on the Indexing Benefits Account. Such amounts are not charged to the basic part of the Fund.

**Pre-retirement:** Increases to deferred annuities of up to 2/3 of the change in CPI are prefunded on the Valuation Balance Sheet between the date of termination and date of pension commencement. Such amounts are charged to the basic part of the Fund.

#### **11. Valuation Process:**

For each event and resulting benefit in the actuarial valuation, we examine the eligibility criteria, benefit amount and maturity value in order to determine the value of that benefit. A description of these items follows:

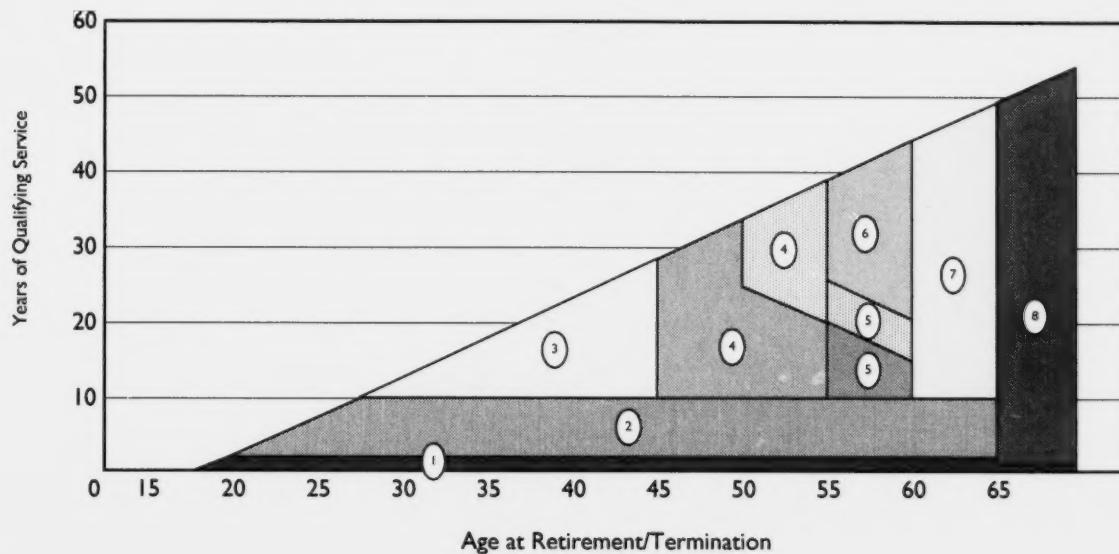
- **Eligibility** - benefits usually depend on some combination of attained age and years of qualifying service recognized in the Act.
- **Benefit Amount** - cash settlements usually equal the participant's required contributions with interest. Pensions are based on the number of years of pensionable service and the average of the best 5 years' pensionable earnings.
- **Maturity Value** - a lump-sum cash settlement and/or a pension. If the benefit is a pension, the normal form of payout is life refunding if single. If married, the normal form of payout is joint-life, reducing to 2/3 on the participant's death (actuarially equivalent to life refunding). Other optional forms of payout are available with different death benefits.

Vested and locked-in pensions can be commuted and transferred to a suitable locked-in vehicle.

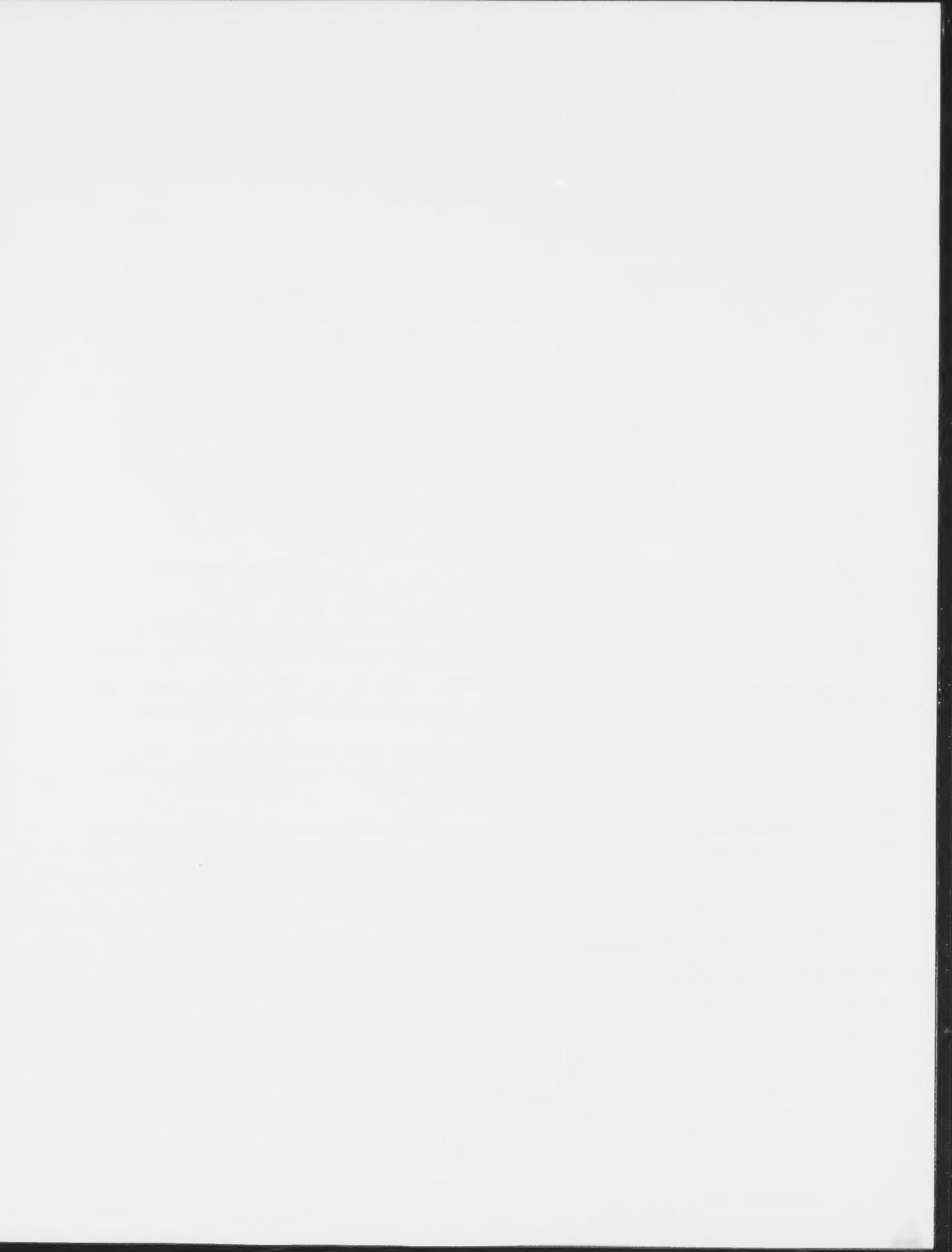
#### **12. Benefit Chart:**

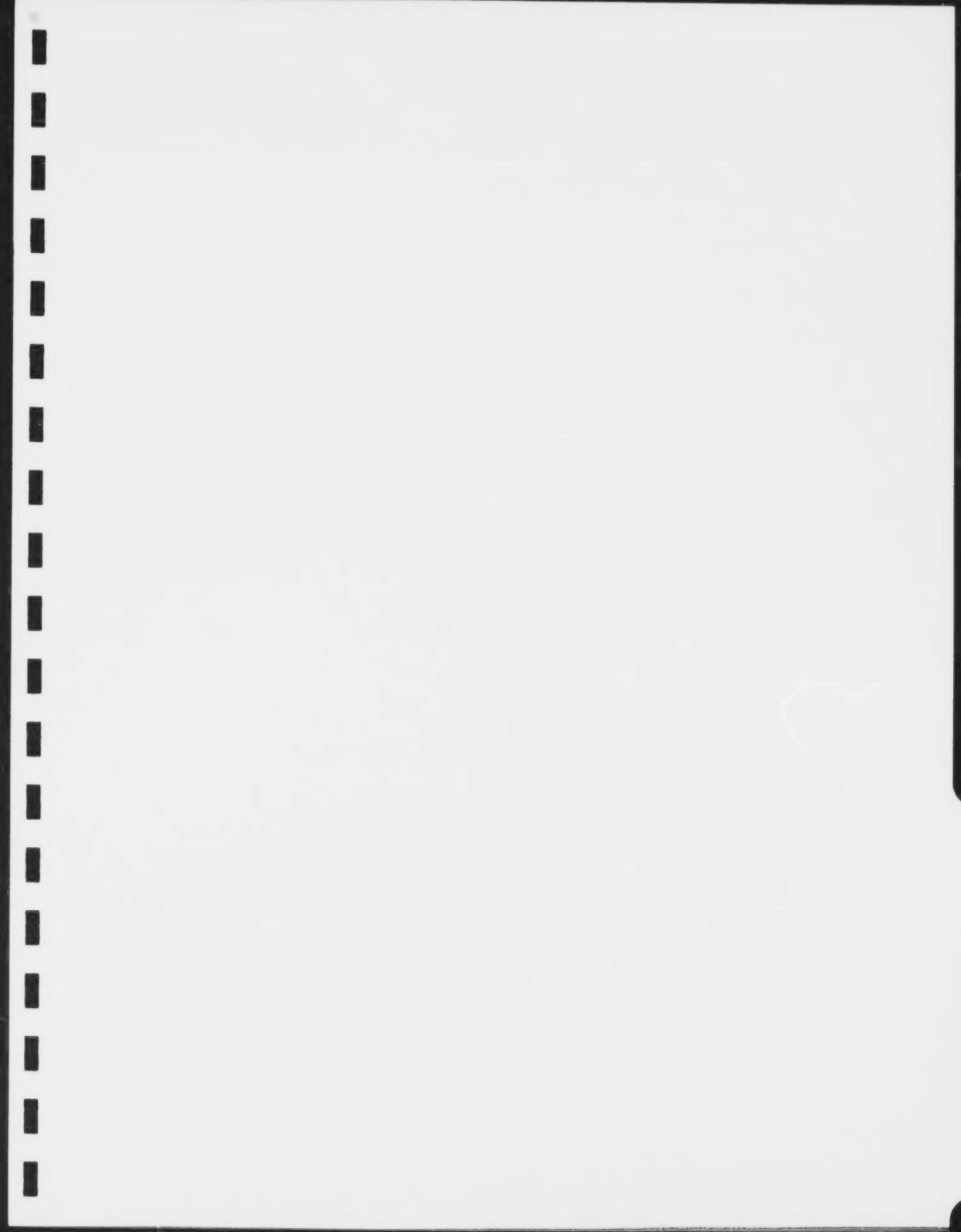
A chart summarizing the main eligibility and benefit amounts on retirement and termination follows:

### Retirement/Termination Eligibility



- 1 Termination ( $t < 1$ , or  $1 < t < 2$  and  $x < 65$ ): cash settlement, not vested, not locked-in
- 2 Termination ( $x < 65$  and  $t \geq 2$  but  $< 10$ ): locked-in vested pension deferred to age 65 for post-1984 service. For pre-1985 service, a choice of cash settlement or deferred pension is available.
- 3 Termination ( $x < 45$  and  $t \geq 10$ ): locked-in vested pension deferred to age 55 for post-1984 service. For pre-1985 service, a choice of cash settlement or deferred pension is available.
- 4 Termination ( $x \geq 45$  but  $< 55$  and  $t \geq 10$ ): locked-in vested pension deferred to age 55 for all service. Correctional Officers can retire as early as age 50 with an unreduced pension if age plus service total 75 or more.
- 5 Early Retirement ( $x \geq 55$  but  $< 60$  and  $t \geq 10$  and  $<$  rule of 80): immediate reduced pension (bridging may occur). Correctional Officers can retire as early as age 50 with an unreduced pension if age plus service total 75 or more.
- 6 Early Retirement ( $x \geq 55$  but  $< 60$  and  $\geq$  rule of 80): immediate unreduced pension
- 7 Early Retirement ( $x \geq 60$  but  $< 65$  and  $t \geq 10$ ): immediate unreduced pension
- 8 Normal and Postponed Retirement ( $x \geq 65$  and  $t \geq 1$ ): immediate unreduced pension







## APPENDIX III

### Actuarial Assumptions

#### A. Going Concern

Actuarial Assumptions and Methods	2007 Going Concern	2004 Going Concern
1. Actuarial Cost Method <ul style="list-style-type: none"> <li>▪ accrued benefit cost method (ABCM)</li> <li>▪ contribution deficiency reserve</li> <li>▪ funding methodology</li> </ul>	ABCM with salary projection next 3 years excludes pay-as-you-go	same same same
2. Asset Valuation Method <ul style="list-style-type: none"> <li>▪ accrued assets</li> <li>▪ asset smoothing reserve</li> </ul>	market value \$375,202,000	same 3.25% of assets
3. Expenses <ul style="list-style-type: none"> <li>▪ explicit valuation balance sheet reserve</li> <li>▪ explicit contribution rate allowance</li> <li>▪ implicit assumed rate of return MER</li> </ul>	none none 0.20%	same same 0.16%
4. Assumed Rate of Return <ul style="list-style-type: none"> <li>▪ inflation rate</li> <li>▪ real rate</li> <li>total nominal rate</li> </ul>	2.50% 4.00% 6.50%	same same same
5. Assumed Salary Increase Rate <ul style="list-style-type: none"> <li>▪ inflation rate</li> <li>▪ real rate</li> <li>▪ service, merit, &amp; promotion (SMP) - average</li> <li>total nominal rate</li> <li>▪ vacation pay allowance</li> </ul>	2.50% 0.75% 1.00% 4.25% 2.68%	same same same same same
6. Indexing <ul style="list-style-type: none"> <li>▪ if retired or eligible to retire</li> <li>▪ existing deferrals during deferral period</li> <li>▪ indexing reserve</li> </ul>	none 1.67% \$145,068,000	same same none
7. Annual Employee Contributions Interest Credit	4.50%	same
8. Annual Rate of Increase in CPP Earnings Maximum	3.25%	same
9. Rate of CRA Maximum Pension Increase	2007: \$2,222 2008: \$2,333 2009: \$2,444 increased at 3.25% thereafter	same same same same
10. Retirement Rates <ul style="list-style-type: none"> <li>▪ if retired</li> <li>▪ otherwise</li> </ul>	immediate vary by age & sex	same same
11. Termination Rates	vary by age & sex	same
12. Disability Rates	vary by age & sex	same
13. Mortality Rates <ul style="list-style-type: none"> <li>▪ pre-retirement</li> <li>▪ post-retirement</li> <li>▪ spousal proportion (generally)</li> <li>▪ spousal ages</li> <li>▪ unisex weightings</li> </ul>	GAM94 GAM94 90%(male) / 71%(female) -5/+3 or exact, if available sex distinct	same same same same same

## I. Actuarial Cost Method

The actuarial cost method for the 2007 Valuation continues to be the accrued benefit cost method (ABCM) with salary projection. ABCM anticipates that the current service cost with interest, when added to the opening liabilities, will be sufficient to finance the liabilities at the end of the next year, after reflecting expected retirements, terminations, disablements, and deaths. This method of valuation is used by approximately 90% of defined benefit pension plans in funding their benefit promises. This method is however more sensitive to an aging demographic active population and will result in increasingly higher current service cost as the population ages. The ABCM method is the preferred method used in the accounting profession for reporting financial obligations of pension plans.

A contribution deficiency reserve of \$57,429,000 has been held on the going concern Valuation Balance Sheet to allow for the annual expected contribution deficiency of \$19,143,000 in the next 3 years.

The Fund consists of the accumulation of those contributions and other payments that were made during the period of employment of the present members. This accumulation will be used to finance a portion or all of the benefits which these members have been promised under the Act. The portion of the benefits so financed includes:

- 100% of the pensions and other benefits to be paid to employees for service if employed by an employer who matched the contributions made by employees,
- 50% of the pensions to be paid to those employees who are employed by an employer who is not matching employee contributions,
- 50% of the commuted value of pensions or benefits generated as a result of service on or after January 1, 1985,
- 100% of the value of the excess contributions paid by employees as a result of service on or after January 1, 1985,
- cash settlements paid on termination of service (refunds of employee contributions plus interest),
- cash settlements paid on death before retirement (employee contributions),
- the value of employee contributions transferred under reciprocal agreements,
- a specified portion of each pension currently being paid, excluding that part of the pension which is charged to the Indexing Benefits Account, plus
- notwithstanding the above cost sharing, the Fund is responsible for 100% of the .2% benefit formula improvement, which was effective September 1, 2000.

The remainder of the benefits is financed by the Province and its Agencies on a pay-as-you-go-basis (non-matching) or is withdrawn out of amounts set aside in accounts established within the Fund for this purpose. This actuarial valuation relates to the benefits which accrued during employment and the assets and contributions available to finance these benefits. The portion of the benefits to be financed by the Province and its Agencies by payments to the Fund is not considered to be a liability of the Fund.

Pursuant to CSSA subsection 22(1), employer funding for employees of more than one non-matching Agency shall be on a pro rata basis in accordance with the portion of the amount paid or transferred to the employee in respect of which no employer matching contributions were made effective for events on or after January 1, 1998.

## 2. Asset Valuation Method

The "actuarial value" of assets consists of the market value of the assets, plus a provision for possible future asset write-ups/(write-downs). The asset write-up/(write-down) is used to provide an appropriate smoothing effect for investment experience to date.

The asset write-up/(write-down) is to be based on a 5-year moving average of the investment experience gain/(loss). Each year, the asset write-up/(write-down) of the prior year is reduced by the actual investment experience gain/(loss) of the current year and increased by the latest 5-year average of the investment experience gain/(loss).

Equivalently, the 5-year moving average asset write-up/(write-down) may be directly computed to be equal to the sum of 80%, 60%, 40%, and 20% of the current year and prior 3 years' investment experience gain/(loss), respectively.

If the net rate of return equals the average assumed rate of return for 4 consecutive years, then the asset write-up/(write-down) will equal zero at the end of that period.

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Year End	Closing Basic & Indexing Assets	Net Investment Income*	Net Rate of Return (%)	Assumed Rate of Return (%)	Investment Experience		Unamortized Portion of Investment Experience	
					Gain/(Loss)		Gain/(Loss)	
					(%)	(\$)	(%)	(\$)
2003	\$ 2,470,842,000	\$ 290,489,000	13.25	6.75	6.50	\$ 142,504,038	0	\$ -
2004	2,772,253,000	329,714,000	13.42	6.75	6.67	163,874,246	20	32,774,849
2005	3,142,408,000	393,972,000	14.27	6.50	7.77	214,517,340	40	85,806,936
2006	3,509,923,000	393,963,000	12.59	6.50	6.09	190,566,693	60	114,340,016
2007	3,587,251,000	124,660,000	3.58	6.50	(2.92)	(101,677,989)	80	(81,342,391)
								\$ 151,579,410
Maximum asset smoothing reserve: 50% of assumed rate of 6.50% of basic assets =								\$ 109,699,000
December 31, 2007 Asset Smoothing Reserve =								\$ 375,202,000

\* Note the net investment income and gains/(losses) are for the whole Fund including the Indexing Benefits Account. A separate asset smoothing reserve is now explicitly calculated for the Account.

\*\* Based on the surplus otherwise available, the above preliminary amount has been adjusted from \$151,579,410 to \$375,202,000 to allow in full, or in part, for possible investment losses in 2008 or later.

### 3. Expenses

- Valuation Balance Sheet Reserve

No explicit expense reserve has been held on the going concern Valuation Balance Sheet.

- Contribution Rate Allowance

No explicit expense allowance has been made in the development of the normal actuarial cost of basic benefits.

- Assumed Rate of Return MER

An implicit management expense rate (MER) has been held in the development of the nominal assumed rate of return found as shown below and on the following page.

2007 Expense	Assets Under		
	Amount	Management	MER
Investment	\$ 5,459,000	\$ 3,587,251,000	0.15%
Administration	1,556,000	3,587,251,000	0.04%
Provision for Adverse			0.01%
Total	\$ 7,015,000		0.20%

#### 4. Assumed Rate of Return

Real Rate Historical (50-year periods generally) Means by Asset Class are shown below based on data provided by the Canadian Institute of Actuaries (CIA).

Lower mean rates have generally been provided for by making downward adjustments to arrive at a Best Estimate Mean Real Rate. These adjustments were made as follows:

- The 50-year short-term asset class mean was decreased due to recognition of account receivables and payables, and the effect of averaging a number of different 50-year economic periods.
- The 50-year Canada long bond asset class (based on yields used in commuted value basis) was decreased due to recognition that an equal portion of the bond portfolio is invested in Provincials and Corporates earning higher real rates, and the effect of averaging a number of different 50-year economic periods.
- The 50-year mortgage asset class mean was increased to recognize historical average spread of 1.50% above Canada long bonds less servicing charges of .50%.
- The 20-year real estate asset class mean was decreased to recognize the ICREIM/IPD Canadian Index as an initial proxy and the historical average spread of 1.00% below the Canadian stock performance.
- The 50-year Canadian stock asset class mean uses the S&P/TSX Index as an initial proxy and the effect of averaging a number of different 50-year economic periods.
- The 50-year U.S. stock asset class mean uses the S&P 500 (Cdn\$) as an initial proxy and the effect of averaging a number of different 50-year economic periods.
- The 30-year International asset class mean uses the EAFE International (Cdn\$) as an initial proxy and the effect of averaging a number of different 30-year economic periods.

Once the Best Estimate Mean Real Rate was obtained for each asset class, it was weighted by the Asset Weight to arrive at the overall rounded Best Estimate Asset Gross Real Rate of 5.35%. This rate was reduced a further 1.35% to 4.00%, to allow for investment fees, actuarial, administration and all other non-investment expenses, and a provision for future adverse deviation. The resulting 4.00% Valuation real interest rate was added to an assumed Valuation inflation rate of 2.50% to arrive at the Valuation assumed rate of 6.50%.

Asset Class	Basis	31-Dec-07		Real Rate Historical Mean	Provision for future Adverse Deviations (PfAD)	Estimate Mean Real Rate
		Asset Weight	Weight			
Short-Term	91-day T-Bills		0.88%	2.55% +	(0.99%) =	1.56%
Bonds	Cdn Long Bonds		29.96%	3.30% +	(0.03%) =	3.27%
Mortgages	Conventional Mortgages		0.95%	4.79% +	(0.52%) =	4.27%
Real Estate Equities	ICREIM/IPD Canadian Index		9.74%	6.64% +	(1.27%) =	5.37%
Canadian Equities	S&P /TSX		28.89%	6.28% +	0.09% =	6.37%
U.S. Equities	S&P 500 in Cdn\$		10.50%	6.61% +	(0.10%) =	6.51%
International Equities	EAFE in Cdn\$		19.08%	7.49% +	(0.85%) =	6.64%
Best Estimate Asset Gross Real Rate based asset weights		<u>100.00%</u>	<u>5.64%</u>	<u>(0.29%)</u>	<u>5.35%</u>	
Provision for Investment Expenses (MER-I)				0.00%	(0.15%)	(0.15%)
Provision for Administration Expenses (MER-A)				0.00%	(0.05%)	(0.05%)
Provision for general future Adverse Deviations (PfAD)				0.00%	(1.15%)	(1.15%)
Valuation Net Real Interest Rate				5.64%	(1.64%)	4.00%
Inflation Rate based on CPI for Canada				4.12%	(1.62%)	2.50%
Valuation Net Nominal Assumed Rate				9.76%	(3.26%)	6.50%

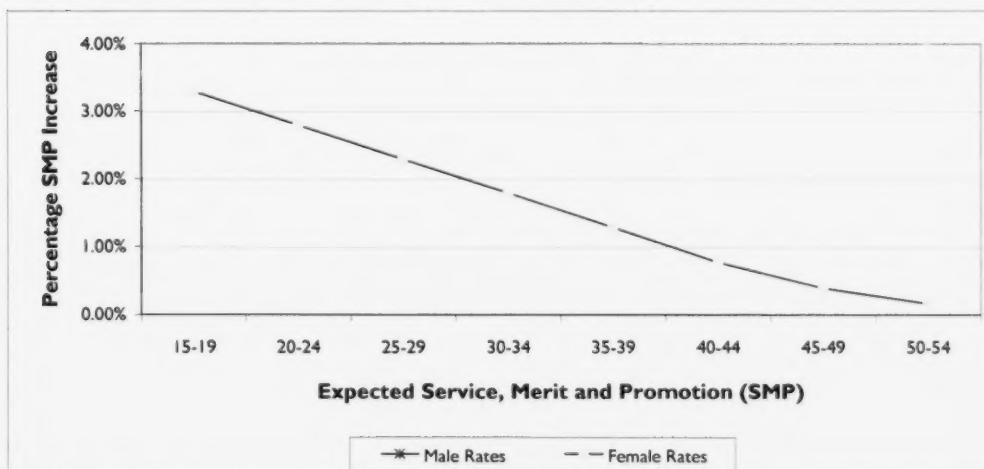
## 5. Assumed Salary Increase Rate

The 2004 general salary increase rate (SINR = inflation plus productivity) and the service merit and promotional rates (SMP) are continued for the 2007 Report. The expected SINR exceeds the recent actual SINR and as a result provides a reasonable best estimate of Plan experience. In addition, SMP rates start at age 16, are unisex, and reach 0.00% at age 55.

Salary Increase Rate	50-Year	25-Year	Used in
Components	Average	Average	Report
Inflation (source CIA Economic Statistics)	4.12%	2.77%	2.50%
Productivity (source CIA Economic Statistics)	0.97%	0.16%	0.75%
General Salary Increase Rate (SINR)	5.09%	2.93%	3.25%
SMP (varies by age as shown in chart below)	1.00%	1.00%	1.00%
Total salary increase rate *	6.09%	3.93%	4.25%

\*To allow for the fact that up to 50 days vacation pay may be used to enhance the best 5 years of salary used in the pension calculation, we have increased liabilities by 2.68% which is based on 35 days of vacation being applied ( $2.68\% = 35/261 * 1/5$ ). In future, it may be necessary to increase this allowance.

Age	Males			Females					
	Active Employees	Average Service	Average Salary	Expected SMP Rates	Age	Active Employees	Average Service	Average Salary	Expected SMP Rates
15-19	26	0.45	29,152	3.29%	15-19	14	0.11	26,534	3.29%
20-24	480	1.27	35,377	2.79%	20-24	381	1.04	33,002	2.79%
25-29	1,009	2.94	44,040	2.29%	25-29	913	2.46	41,379	2.29%
30-34	1,295	4.80	50,424	1.78%	30-34	1,313	4.10	45,486	1.78%
35-39	1,600	7.02	54,670	1.28%	35-39	1,471	6.03	48,707	1.28%
40-44	2,023	11.54	58,322	0.76%	40-44	2,111	9.74	49,829	0.76%
45-49	2,300	14.75	58,122	0.38%	45-49	2,496	13.43	50,393	0.38%
50-54	2,615	20.05	60,665	0.15%	50-54	2,496	17.09	51,338	0.15%
55-59	1,837	21.16	62,351	0.00%	55-59	1,491	17.21	51,863	0.00%
60-64	762	20.01	62,052	0.00%	60-64	494	16.02	48,505	0.00%
65-69	109	19.12	63,021	0.00%	65-69	71	14.81	49,033	0.00%
31-Dec-07	14,056	13.30	56,484		31-Dec-07	13,251	11.19	48,749	
31-Dec-04	13,992	13.42	52,030		31-Dec-04	12,769	10.53	44,460	
<2007 Actual SINR		2.78%			<2007 Actual SINR		3.12%		
2008 Expected SINR		3.25%			2008 Expected SINR		3.25%		



## **6. Indexing**

- If retired or eligible to retire

No allowance for post-retirement indexing in this Valuation of the basic benefits. Separately, a report is prepared on the Indexing Benefits Account and separate reports for each of the pay-as-you-go employers which allows for some post-retirement indexing.

- Existing deferred pensions during deferral period.

The 2004 existing terminated employees who have elected a deferred pension in the Fund are continued for the 2007 Report to have indexation of their otherwise static pension by 2/3rds of the increase in inflation, equal to 1.67% for this Valuation.

## **7. Annual Employee Contributions Interest Credit**

The 2004 annual employee contribution interest credit of 4.50% is continued for the 2007 Report. This rate is based on 5-year personal fixed term deposits (CANSIM B14045) and generally assumed to be 2.00% lower than the nominal assumed rate of return, currently equal to 6.50%.

## **8. Annual Rate of Increase in CPP Earnings Maximum**

The 2004 annual rate of increase in the CPP Earnings Maximum of 3.25% is continued for the 2007 Report. The rate continues to be based on the general salary increase rates (SINR = inflation plus productivity) found in this Report.

## **9. Rate of CRA Maximum Pension Increase**

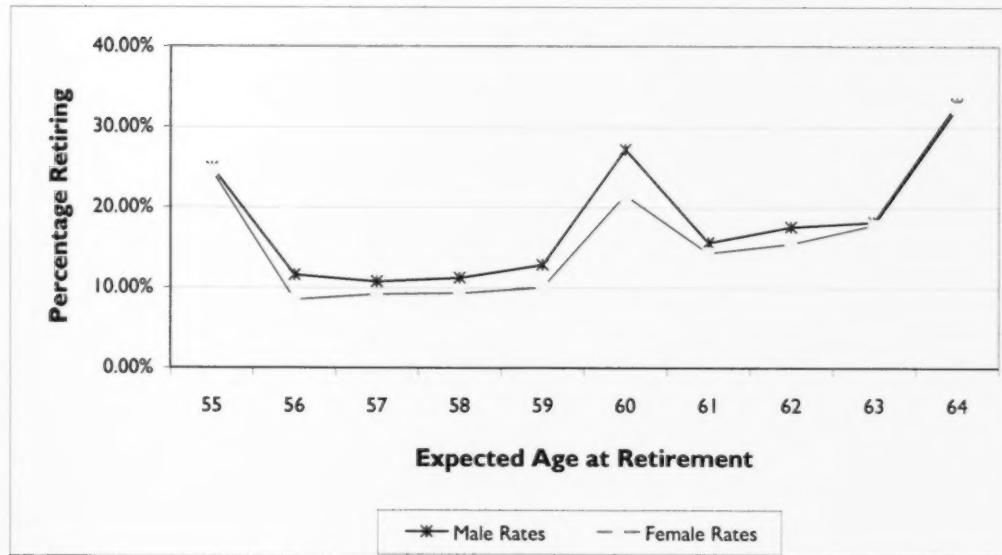
The 2004 rate of increase in the CRA Maximum Pension of 3.25% is continued for the 2007 Report. The rate continues to be based on the general salary increase rates (SINR = inflation plus productivity) found in this Report, after the stipulated rates for 2008 and 2009 encoded in the Income Tax Act, have occurred.

## 10. Retirement Rates

The 2004 retirement rates are continued for the 2007 Report. The expected retirements exceed the recent actual retirements and as a result, they provide a reasonable best estimate of Plan experience. Rates start at age 55, vary by sex, and reach 100.00% at age 65.

Males				Females			
Age	Participants Exposed	Expected Retirements	Expected Rates	Age	Participants Exposed	Expected Retirements	Expected Rates
15-49	9,428	-	0.00%	15-49	9,546	-	0.00%
50-54	2,972	-	0.00%	50-54	2,942	-	0.00%
55	462	114.85	24.86%	55	428	104.82	24.49%
56	431	49.61	11.51%	56	371	31.20	8.41%
57	420	44.90	10.69%	57	339	30.92	9.12%
58	357	39.88	11.17%	58	308	28.34	9.20%
59	326	41.73	12.80%	59	241	23.93	9.93%
60	247	66.94	27.10%	60	202	43.33	21.45%
61	225	34.92	15.52%	61	154	21.90	14.22%
62	152	26.60	17.50%	62	98	15.06	15.37%
63	119	21.55	18.11%	63	74	13.11	17.72%
64	109	35.78	32.83%	64	64	20.68	32.31%
65-70	113	113.00	100.00%	65-70	79	79.00	100.00%
	15,361	589.76			14,846	412.29	

2005	Actual Male & Female Retirements	755
2006	Actual Male & Female Retirements	777
2007	Actual Male & Female Retirements	948
2008	Expected Male & Female Retirements	1,002.05

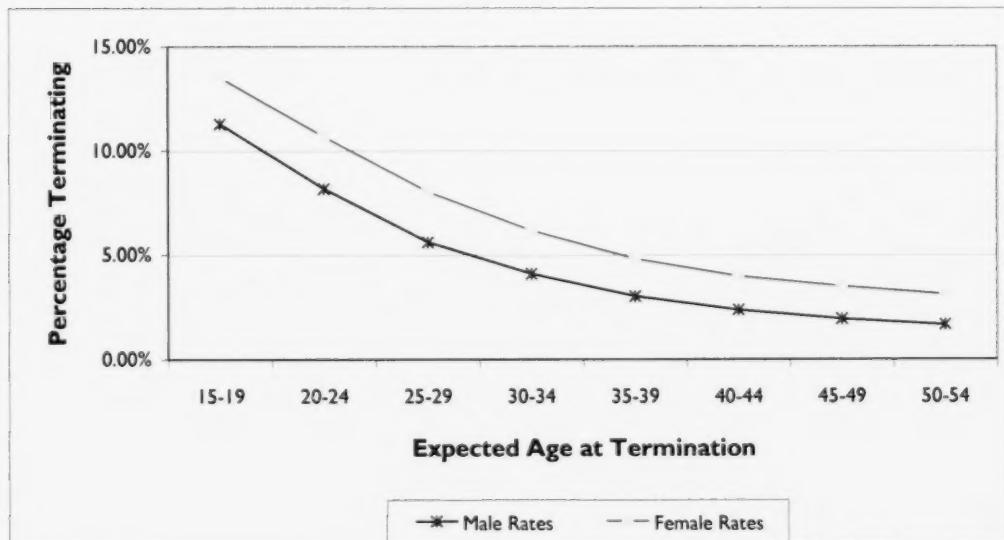


## II. Termination Rates

The 2004 termination rates are continued for the 2007 Report. The expected terminations are less than recent actual terminations, which in turn mean that more participants are assumed to continue in the work force and eventually retire, and as a result, they provide a reasonable best estimate of Plan experience. Rates start at age 16, vary by sex, and reach 0.00% at age 55.

Males			Females		
Age	Participants Exposed	Expected Terminations	Age	Participants Exposed	Expected Rates
15-19	26	2.93	15-19	14	1.89
20-24	486	39.60	20-24	381	10.67%
25-29	1,040	58.07	25-29	938	8.02%
30-34	1,354	55.14	30-34	1,380	6.17%
35-39	1,711	51.21	35-39	1,592	4.79%
40-44	2,228	52.11	40-44	2,349	3.95%
45-49	2,583	49.07	45-49	2,892	3.47%
50-54	2,972	48.17	50-54	2,942	3.07%
55-59	1,996	-	55-59	1,687	0.00%
60-64	852	-	60-64	592	0.00%
65-69	113	-	65-69	79	0.00%
	15,361	356.30		14,846	562.43

2005	Actual Male & Female Terminations	1,060
2006	Actual Male & Female Terminations	1,251
2007	Actual Male & Female Terminations	1,172
2008	Expected Male & Female Terminations	918.73

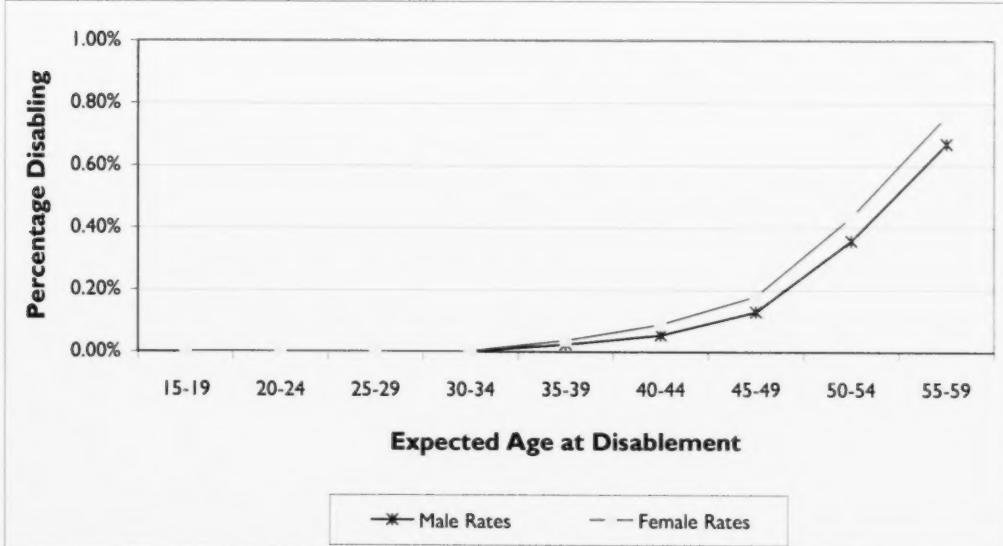


## 12. Disability Rates

The 2004 disability rates are continued for the 2007 Report. The expected disablements are close to the recent actual disablements, and as a result, they provide a reasonable best estimate of Plan experience. Rates start at age 35, vary by sex, and reach 0.00% at age 60.

Males				Females			
Age	Participants Exposed	Expected Disables	Expected Rates	Age	Participants Exposed	Expected Disables	Expected Rates
15-19	26	-	0.00%	15-19	14	-	0.00%
20-24	486	-	0.00%	20-24	381	-	0.00%
25-29	1,040	-	0.00%	25-29	938	-	0.00%
30-34	1,354	-	0.00%	30-34	1,380	-	0.00%
35-39	1,711	0.39	0.02%	35-39	1,592	0.56	0.04%
40-44	2,228	1.18	0.05%	40-44	2,349	2.03	0.09%
45-49	2,583	3.30	0.13%	45-49	2,892	5.13	0.18%
50-54	2,972	10.59	0.36%	50-54	2,942	12.71	0.43%
55-59	1,996	13.31	0.67%	55-59	1,687	12.76	0.76%
60-64	852	-	0.00%	60-64	592	-	0.00%
65-69	113	-	0.00%	65-69	79	-	0.00%
	15,361	28.77			14,846	33.19	

2005	Actual Male & Female Disablements	63
2006	Actual Male & Female Disablements	63
2007	Actual Male & Female Disablements	65
2008	Expected Male & Female Disablements	61.96



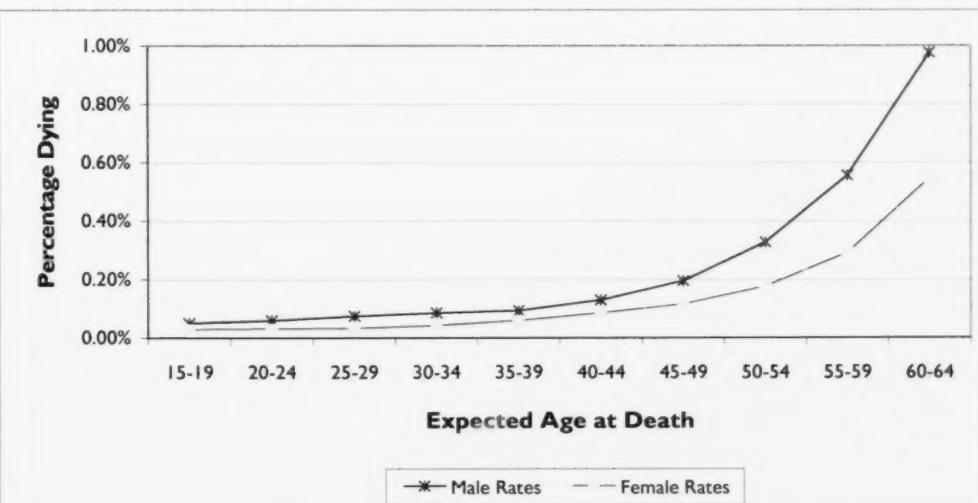
### 13. Death Rates - Pre-Retirement

The 2004 pre-retirement death rates (GAM94) are continued for the 2007 Report. The expected death rates are close to the recent actual pre-retirement deaths, and as a result, they provide a reasonable best estimate of Plan experience. Rates start at age 16, vary by sex, and reach 0.00% at age 65. Given that lump-sum commuted value payouts are prescribed on the basis of the UP2015 mortality table consideration has also be given to this table below.

Spousal status was assumed where required in calculating pre-retirement death benefits, generally 91% males and 71% females assumed to have a spouse at the higher ages and lower proportions at the younger ages. Spouse age difference was assumed generally to be minus 5 if a male participant and plus 3 if a female participant. All liabilities were valued on a sex distinct basis.

Males				Females			
Age	Participants Exposed	Expected Deaths	Expected Rates	Age	Participants Exposed	Expected Deaths	Expected Rates
15-19	26	0.01	0.05%	15-19	14	0.00	0.03%
20-24	486	0.28	0.06%	20-24	381	0.11	0.03%
25-29	1,040	0.76	0.07%	25-29	938	0.29	0.03%
30-34	1,354	1.13	0.08%	30-34	1,380	0.55	0.04%
35-39	1,711	1.56	0.09%	35-39	1,592	0.90	0.06%
40-44	2,228	2.83	0.13%	40-44	2,349	1.95	0.08%
45-49	2,583	4.98	0.19%	45-49	2,892	3.25	0.11%
50-54	2,972	9.68	0.33%	50-54	2,942	5.12	0.17%
55-59	1,996	11.08	0.56%	55-59	1,687	4.89	0.29%
60-64	852	8.31	0.98%	60-64	592	3.23	0.55%
65-69	113	-	0.00%	65-69	79	-	0.00%
	15,361	40.62			14,846	20.30	

2005	Actual Male & Female Deaths	57
2006	Actual Male & Female Deaths	42
2007	Actual Male & Female Deaths	62
2008	Expected Male & Female Deaths	60.92 GAM94
2008	Expected Male & Female Deaths	48.97 UP2015



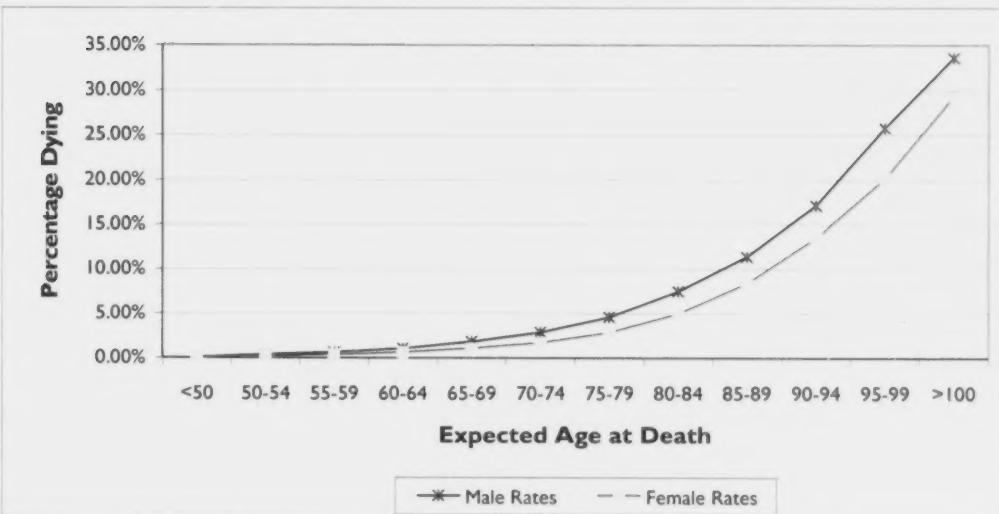
### 13. Death Rates - Post-Retirement

The 2004 post-retirement death rates (GAM94) are continued for the 2007 Report. The expected death rates are close to the recent actual post-retirement deaths, and as a result, they provide a reasonable best estimate of Plan experience. Rates start at age 16, vary by sex, and reach 100.00% at age 115. Given that lump-sum commuted value payouts are prescribed on the basis of the UP2015 mortality table, consideration has also be given to this table below.

Exact spousal status and spouse age was used for those pension options that were joint or for survivor pensions in payment. All liabilities were valued on a sex distinct basis.

Males (excludes Survivors)				Females (excludes Survivors)			
Age	Pensioners Exposed	Expected Deaths	Expected Rates	Age	Pensioners Exposed	Expected Deaths	Expected Rates
<50	18	0.01	0.06%	<50	36	0.03	0.08%
50-54	54	0.19	0.35%	50-54	60	0.12	0.20%
55-59	1,071	6.31	0.59%	55-59	783	2.39	0.31%
60-64	1,730	17.52	1.01%	60-64	1,024	5.96	0.58%
65-69	1,562	28.09	1.80%	65-69	959	10.17	1.06%
70-74	1,270	36.21	2.85%	70-74	606	10.13	1.67%
75-79	984	44.49	4.52%	75-79	528	14.78	2.80%
80-84	661	48.99	7.41%	80-84	356	17.42	4.89%
85-89	323	36.46	11.29%	85-89	182	15.13	8.31%
90-94	85	14.48	17.04%	90-94	74	9.94	13.43%
95-99	17	4.36	25.65%	95-99	27	5.41	20.04%
>100	2	0.67	33.50%	>100	4	1.17	29.25%
	7,777	237.78			4,639	92.65	

2005	Actual Male & Female Deaths	336
2006	Actual Male & Female Deaths	333
2007	Actual Male & Female Deaths	340
2008	Expected Male & Female Deaths	330.43 GAM94
2008	Expected Male & Female Deaths	293.51 UP2015



## B. Solvency Test\*

<i>Actuarial Assumptions and Methods</i>	<i>2007 Solvency Test</i>			<i>2004 Solvency Test</i>		
1. Actuarial Cost Method <ul style="list-style-type: none"> <li>▪ accrued benefit cost method (ABCM)</li> <li>▪ contribution deficiency reserve</li> <li>▪ funding methodology</li> </ul>	ABCM with no salary projection				same	
	none				same	
	excludes pay-as-you-go				same	
2. Asset Valuation Method <ul style="list-style-type: none"> <li>▪ accrued assets</li> <li>▪ asset smoothing reserve</li> </ul>	market value				same	
	none				same	
3. Expenses <ul style="list-style-type: none"> <li>▪ explicit valuation balance sheet reserve</li> <li>▪ explicit contribution rate allowance</li> <li>▪ implicit assumed rate of return MER</li> </ul>	.50% of assets				same	
	none				same	
	.20% of assets				same	
4. Assumed Rate of Return	Annuity	<i>Cash Settlements</i>		Annuity	<i>Cash Settlements</i>	
	<u>Purchases</u>	<u>&lt;10 Yrs</u>	<u>&gt;10 Yrs</u>	<u>Purchases</u>	<u>&lt;15 Yrs</u>	<u>&gt;15 Yrs</u>
	2.24	2.24	2.34	2.91	2.91	2.66
	2.26	2.51	2.66	2.59	2.59	3.34
	<u>4.50</u>	<u>4.75</u>	<u>5.00</u>	<u>5.50</u>	<u>5.50</u>	<u>6.00</u>
5. Assumed Salary Increase Rate <ul style="list-style-type: none"> <li>▪ inflation rate</li> <li>▪ real rate</li> <li>▪ service, merit &amp; promotion (SMP) -average total nominal rate</li> <li>▪ vacation pay allowance</li> </ul>	none				same	
	none				same	
	none				same	
	none				same	
	2.68%				same	
6. Indexing <ul style="list-style-type: none"> <li>▪ if retired or eligible to retire</li> <li>▪ existing deferrals during deferral period</li> <li>▪ indexing reserve</li> </ul>	none				same	
	none				same	
	none				same	
7. Annual Employee Contributions Interest Credit	none				same	
8. Annual Rate of Increase in CPP Earnings Maximum	none				same	
9. Rate of CRA Maximum Pension Increase	2007: \$2,222 2008: \$2,333 2009: \$2,444 Indexed at 0.00% thereafter				same	
10. Retirement Age <ul style="list-style-type: none"> <li>▪ if retired or eligible to retire</li> <li>▪ otherwise</li> </ul>	immediate				same	
	first age possible				same	
11. Termination Rates	commuted value				same	
12. Disability Rates	commuted value				same	
13. Mortality Rates <ul style="list-style-type: none"> <li>▪ pre-retirement</li> <li>▪ post-retirement</li> <li>▪ spousal proportion (generally)</li> <li>▪ spousal ages</li> <li>▪ unisex weightings</li> </ul>	none UP2015 exact if available -5/+3 or exact, if available sex distinct				same GAM83 same same same	

\* The solvency test is provided for information only as the Plan is exempt from the funding requirements of the solvency test pursuant to Section 26(c) of the Regulations to the Manitoba Pension Benefits Act.

## Development of the Solvency Test Rate of Return

- If Retired or Eligible to Retire (Purchase of Annuities)

The solvency discount rate for annuities is based on the studies made by the Canadian Institute of Actuaries. The most recent study has found that the appropriate annuity interest rate to be used in performing solvency Valuations with effective dates as at December 31, 2007 is determined by the following table at the Valuation date in conjunction with the mortality table UP2015.

Annuity Purchases	Interest Rate
0	4.10%
$\geq 15,000,000$	4.50%

- Otherwise (Cash Settlements)

The discount rates for cash settlements in the solvency Valuation are based on the same rates that are used for the commuted value calculations including the 2-month lag as required by the Canadian Institute of Actuaries (CIA) standards. Effective for events commencing in February, 2005, the Canadian Institute of Actuaries (CIA) standards utilize the 1994 Uninsured Pensioner Mortality Table (UPI994) projected for mortality improvement to 2015 (UP2015), and the dual interest rates, one applicable to the first 10 years and the other applicable thereafter. These rates are based on the following CANSIM series and formulas:

CANSIM B14070 OCTOBER, 2007 RATE ( $i_7$ ) = 4.24% (semi annual)

CANSIM B14072 OCTOBER, 2007 RATE ( $i_L$ ) = 4.38% (semi annual)

First 10 Years:  $= i_7 + 0.50\% = 4.74\%$

After 10 Years:  $= i_L + 0.50 * (i_L - i_7) + 0.50\% = 4.95\%$

The final rates reflect the required annualization and rounding to the nearest 0.25%. As a result, the rates that have been used for cash settlements are equal to 4.75% for the first 10 years and 5.00% thereafter.

